

Countries
of the World

THIRD VOLUME



Power & Force - An Iceland Fall

COUNTRIES OF THE WORLD

Described by the Leading
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Photogravure

Edited by
J. A. Hammerton

THIRD VOLUME
1898 1453 2162

Constantinople to Iceland



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Corner of Asia in Europe's Borders

by Roy Elston

Author of "Constantinople Gallipoli and Asia Minor"

WHEN the first Megarian immigrants chose to settle at Chalcedon, on the eastern side of the Bosphorus the Delphic oracle called them blind. The epithet was just for they had passed by what is probably the greatest and most obvious site for a metropolis that exists in the world, that site "by Pontus' mouth upon the shore of Thrace which was at length to become the great city Constantinople mistress of two continents and as many seas.

There East and West mingle not only politically but also geographically for Constantinople lies actually upon a detached piece of Asia—an Asian promontory cleft from its natural body by a comparatively recent upheaval.

It lies at the junction of the Sea of Marmora and the Bosphorus in lat. 41° 0' 16" north and long. 29° 59' 14" east and the city proper which we call Stamboul is situated on a triangular site formed something like a harp—that is the old Byzantium constructed upon seven hills after the fashion of Rome its prototype.

A Mosaic of Cities I On

But for geographical purposes Constantinople may be taken to lie upon the seventy and seven hills that swing from Yedi-Kuleh on the Sea of Marmora to Rumeli Kavak at the farther end of the Bosphorus, and from Hacı Keui below Haidar Pasha to Anatoli Kavak which together with Rumeli Kavak commands the entrance to the Black Sea. Within these boundaries are included Stamboul, Galata, Pera the suburbs which line both shores of the Golden Horn and the string of settlements upon both sides of the Bosphorus.

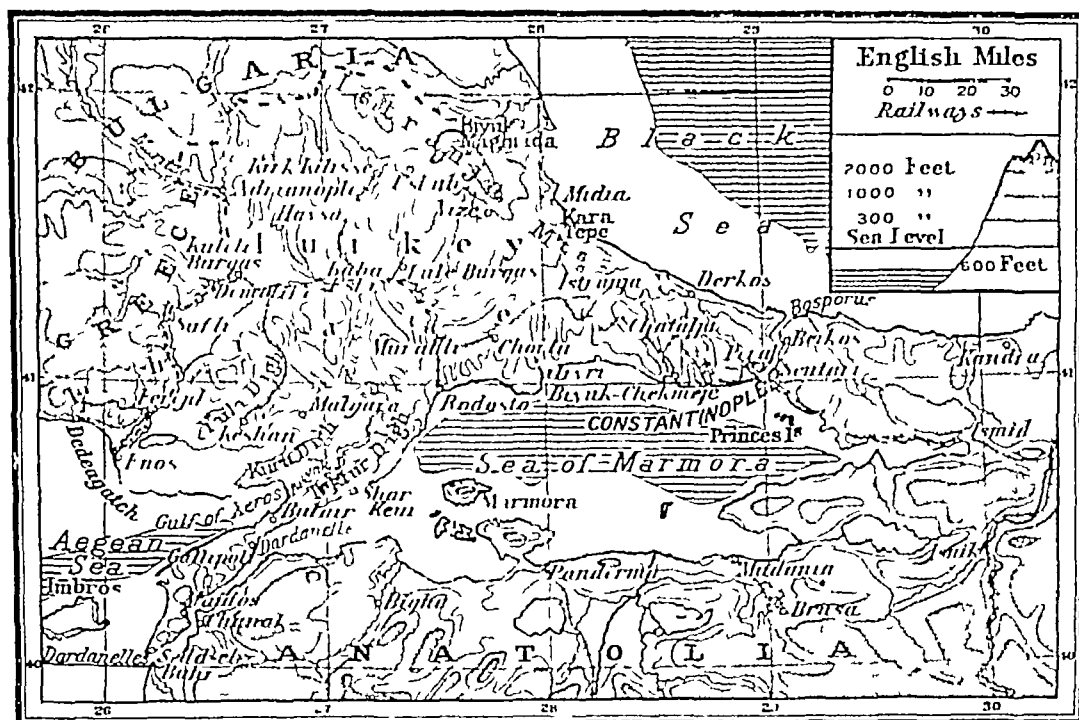
Constantinople proper is however made up of three distinct divisions—Stamboul, Galata, Pera and Scutari—separated from each other by arms of the sea. We shall observe each in its turn beginning with Stamboul.

Seven Hills of Old Stamboul

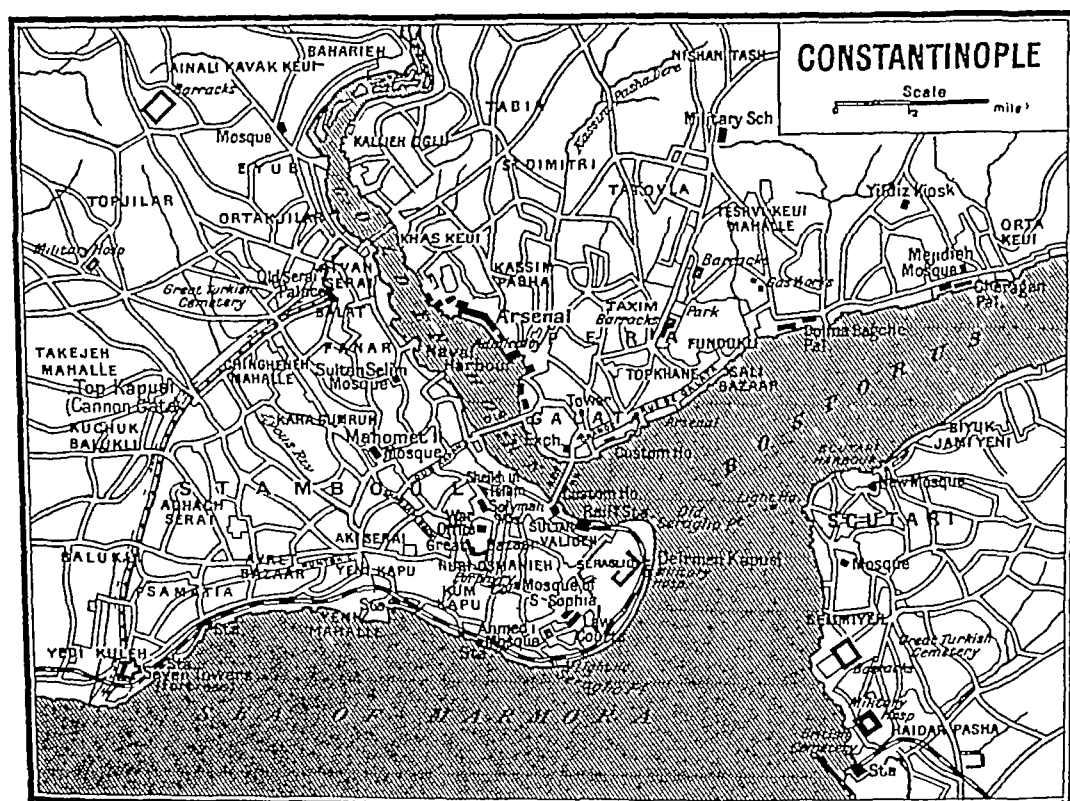
Stamboul rises from a tongue of land which juts out between the Golden Horn on the north, the Bosphorus on its eastern apex and the Sea of Marmora on the south, and terminates in Old Scutario Point. It is a central ridge separated from a lesser one by the Lycus valley which more or less follows the line of the Golden Horn and has an inconsiderable stream running through it. The site which never rises higher than 253 feet is triangular in form and has a circuit of about 13 miles.

Stamboul is said to have been built on seven hills though it is difficult to establish them in relief. The ridge between the Lycus and the Sea of Marmora is one of these, the other six are mere undulations and each is best distinguished by some architectural feature upon it. The first of these seven hills we may take as that which previously formed the Acropolis of Byzantium, the Old Scutario. St. Sophia and relics of the Hippodrome are upon it. The second hill is now marked by the Porphyry Column, the third by the Mosque of Solyman, the fourth by the Mosque of Mahomet, the fifth by that of Selim, the sixth by the ruins of the Hebdomon Palace and the seventh which is divided from the other six by the Lycus, is distinguished by the Fortress of the Seven Towers.

Stamboul is composed of forty three quarters, all of them Turkish with the



EUROPEAN TURKEY AND THE SHORES OF THE SEA OF MARMORA



THE THREE WATER-SUNDERED DIVISIONS OF CONSTANTINOPLE

exception of their. The whole place is a labyrinth of narrow streets and alleys, thick with people and life. The city is a mass of buildings, some of which are of great age and some of which are of more recent date. The city is a mass of buildings, some of which are of great age and some of which are of more recent date. The city is a mass of buildings, some of which are of great age and some of which are of more recent date.



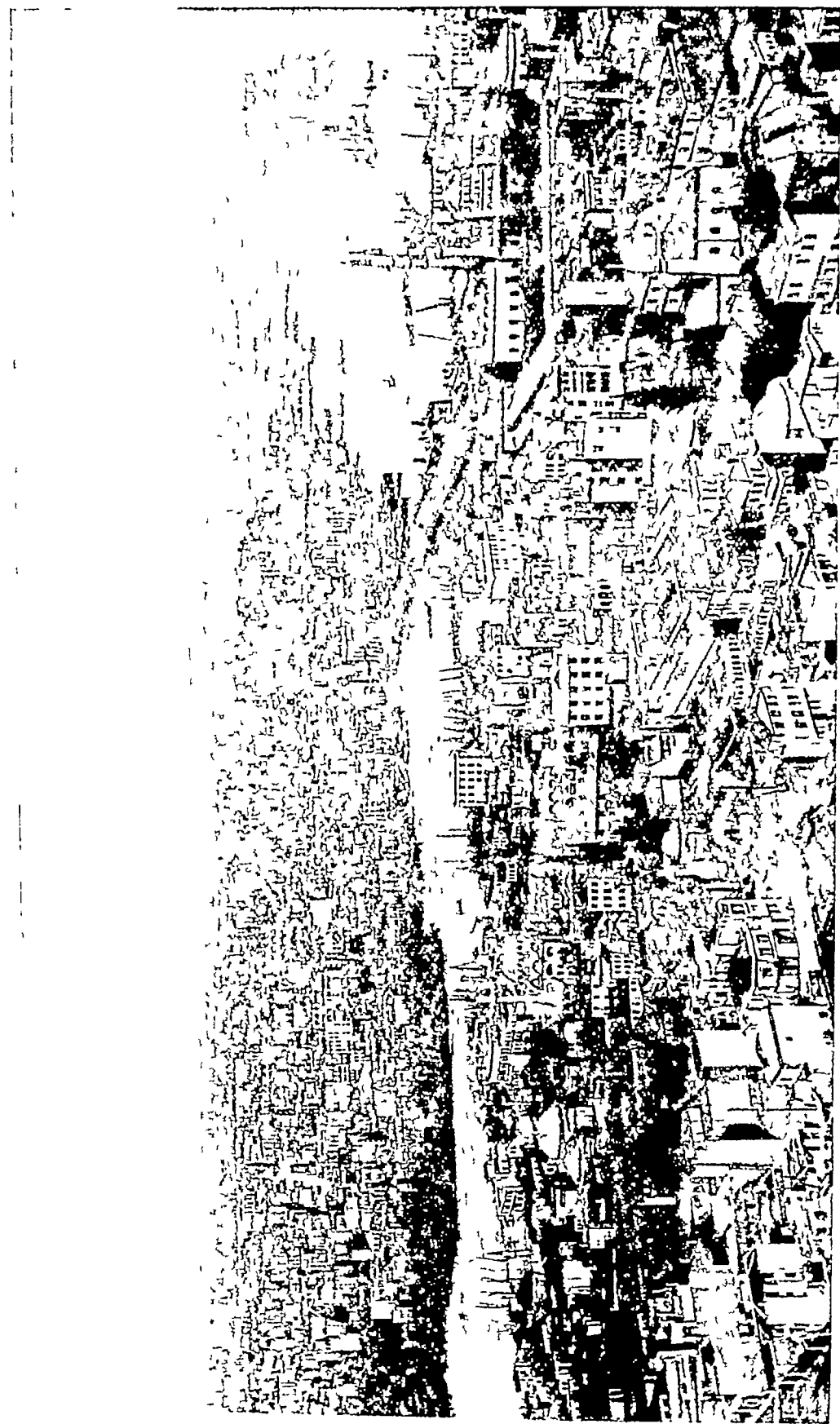
POPULOUS SETTLEMENTS ON THE BOSPORUS

Turn away from the wall. Yonder at the western end of the Golden Horn I see the minarets rise heavenwards from the great mosque. On the other side of the inlet you see the hills and behind the green field and then the hills nearer at hand is the great mosque of Selimian and down at its feet the old bridge called Arab Kupri whose planks are tottering. Above the bridge the elegant marble building known of old as the Turkish Admiralty Office stands aloof with a fine disdain from the wretched streets it dominates. And farther east till within a stone's throw is the New Bridge thick with people and a field in spring is thick with flowers and as luxuriant in colour. Behind this white gleaming and angular like a cubit design are the quarters of Calia Pera.

Now turn your gaze north-east along the Bosphorus where mosques gleam white and wooded hills refresh us, and

Turn away from the wall. Yonder at the western end of the Golden Horn I see the minarets rise heavenwards from the great mosque. On the other side of the inlet you see the hills and behind the green field and then the hills nearer at hand is the great mosque of Selimian and down at its feet the old bridge called Arab Kupri whose planks are tottering. Above the bridge the elegant marble building known of old as the Turkish Admiralty Office stands aloof with a fine disdain from the wretched streets it dominates. And farther east till within a stone's throw is the New Bridge thick with people and a field in spring is thick with flowers and as luxuriant in colour. Behind this white gleaming and angular like a cubit design are the quarters of Calia Pera.

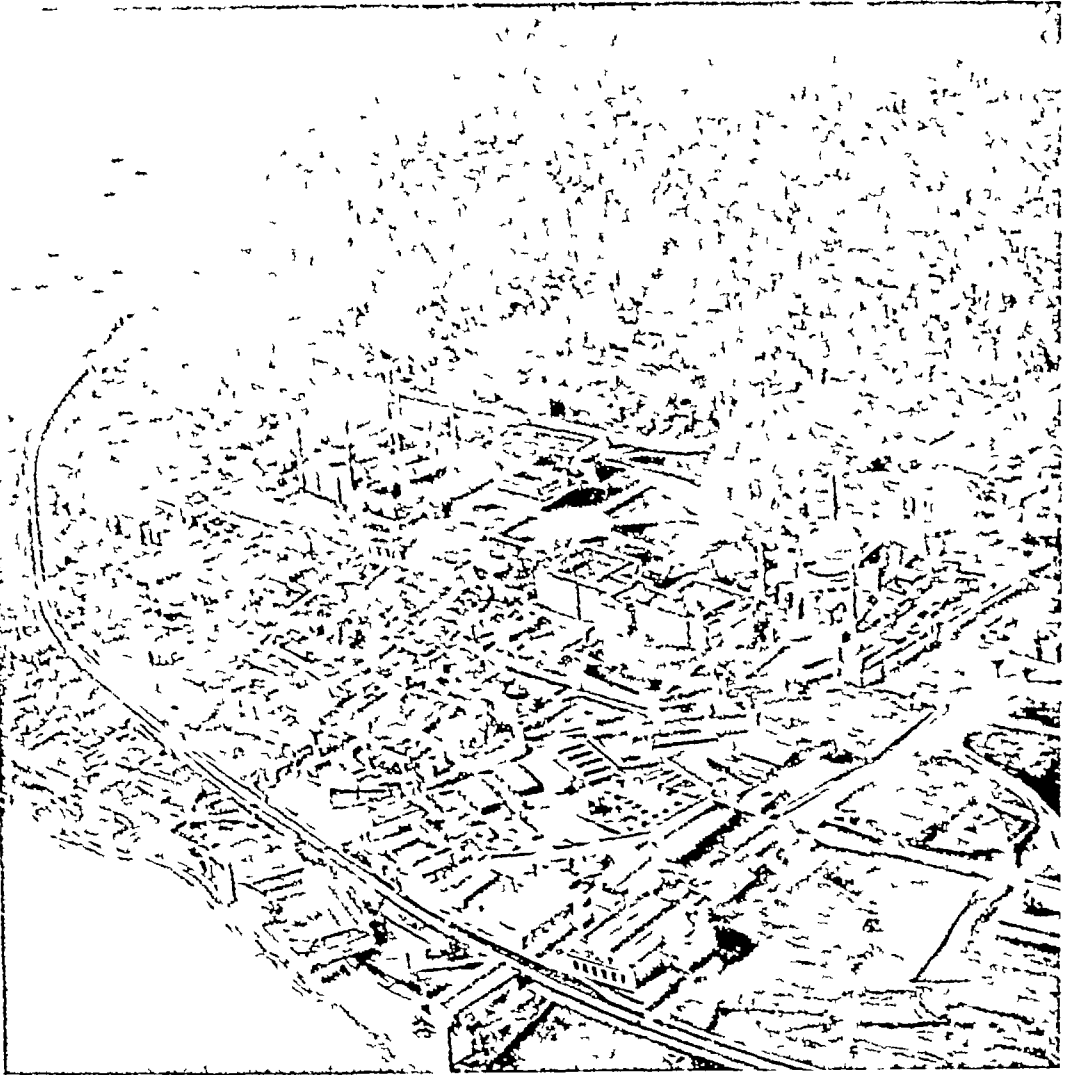
Now turn your gaze north-east along the Bosphorus where mosques gleam white and wooded hills refresh us, and



STAMBOUL AND GALATA DIVIDED BY THE GOLDEN HORN, AND THE DISTANT WATERS OF THE BOSPORUS
Ancient Byzantium occupied the site of what is now Stamboul, a portion of which is seen above between the foreground and the centre. This is the most crowded part of Constantinople and very Turkish in appearance, whereas Pera and Galata on the farther side are the business quarters of the city. The Golden Horn makes a fine arterial harbour and is crossed by two bridges, the old bridge out of the photograph to the left and the New or Galatâ Bridge seen to the right. Both banks are crowded with shipping, as is the bridge on the seaward side. To the right of its nearer end is the dome of Yeni Valideh seen in page 146r



CASTLE OF THE SEVEN TOWERS AND THE LONG LINE OF BATTLEMENTS WHICH DEFENDED CONSTANTINOPLE
 Stamboul peninsula, is the Golden Horn on the north and the Sea of Marmora protecting two other sides, created itself from early times, site can be of strong defense. The remains of three walls from water to water and, beginning they approach the peninsula, and still as is the highest being about 60 miles in extent and backed by the fortifications erected in the time of Theodosius II. At the south end of this is the Cardo, the triumphal arch where the city was called Byzantium, and surrounding it is the castle of Veli-Husein, seven towers, which was rebuilt by M. Basil II.



STAMBOUL LIKE A MAP BENEATH THE AEROPLANE'S WING

Looking down over the aeroplane's side as it sweeps over Stamboul the great girth of Aya Sophia appears to the right seeming strangely squat between its four minarets, while to the left are the cupola and court of the mosque of Sultan Ahmed. Following the shores of the Sea of Marmora the railway runs towards Chatalja and Bulgaria.

brown sails intrigue us. South-eastward is the great white station of Haidar Pasha where starts the railway to Bagdad, and the cypress trees that rise from Scutari. Still farther south are the Princes' Islands, and behind these, where the Marmora loses outline in a blue mist, vague shapes stretch out indefinitely, and dissolve, at length, into a soft, white horizon deep in the heart of storied Anatolia.

The second division of Constantinople is that which comprises Galata, the centre of banking and shipping, and Pera the chief shopping and European quarter. Briefly their situation is this

two plateaux north of the Golden Horn running more or less from north-east to south-west are divided by a steep valley that of Kassim Pasha, and bounded on the west by the valley of Kiaghat Kaneh Su, which enters the Golden Horn at the Sweet Waters of Europe, and on the south by the Golden Horn. The summit of the eastern plateau bears Pera, and at the foot of its slopes lie the offices, warehouses, quays and whatnot of Galata. The Bosphorus, running south-west at right angles with the Golden Horn, makes Galata-Pera the second of the three promontories of Constantinople.

There is no need to describe this division fully. Calata is the centre of the foreign trade with the chief foreign bank, shipping agencies, warehouses and the like situated in its streets. Outside the main thoroughfare it is an unsavoury place with narrow stone stairways for street and a general tendency to outdo the worst parts of Stambul. Pera contain all the hotels, hotels and amusements of the city, as well as embassies, consulates and many European residences.

The valley of Ka rni Pa ha mu lit with justice be included in this division. It is reached either by twisted road from near the arsenal or by steep descents west of Pera and is crowded with small unobstantial houses. West of the valley and descending thence to the Golden Horn are the suburbs of Khas Keui and Kalijeh Olu the plateau itself—the western of the two mentioned above—is a common. The valley of Khasat Khaseli bounding the division on the west has at its lower end the Sweet Waters of Europe.

Such are the two European divisions of Constantinople. They have similar characteristics but a geographical and

social gap divides them both from the third division of the city Scutari which lies on the Asiatic shore of the Bosphorus opposite the mouth of the Golden Horn. Scutari hugs the lower seaward slopes of Mount Bulgurlu which juts into the Bosphorus east of the Golden Horn and rises 850 feet above the sea. The division is predominantly Moslem in population.

The Golden Horn extends from Old Scutari Point where it meets the Bosphorus to the Sweet Waters of Europe at the confluence of two small rivers the Cydus and Barlysus the two which are referred to by the Delphic oracle in their advice to Byza the founder of the first settlement. It runs from east to north its width at the mouth is about one thousand yards and its course to the two streams for about four miles. It is like a stag-horn says Strabo "for it is broken into wavy creeks like so many branches."

The main harbour is at the entrance to the Horn where its north side is fringed by nearly half a mile of quays extending from Calata to Topkane on its southern side there is a quay about 400 yards long when ships of



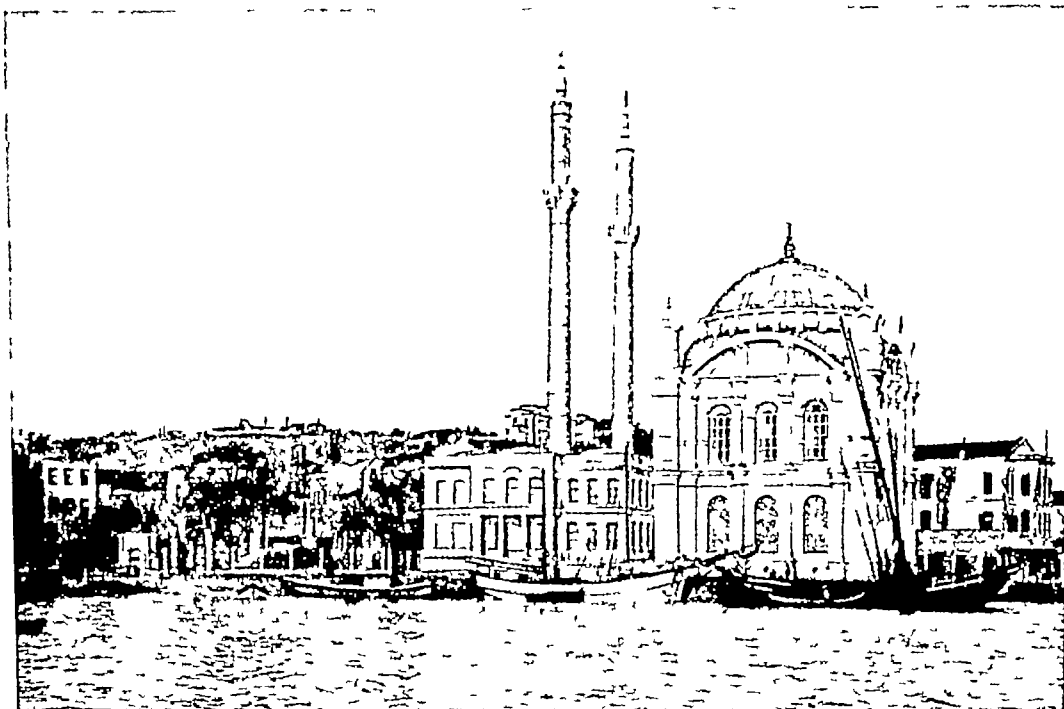
BEAUTIFUL MOSQUE OF SOLYMAN THE GREAT NEAR THE GOLDEN HORN
Fronted by a porch 125 feet by 125 feet in area and with four minarets of unequal height at the corners, the mosque of Solyman the Great was built during 1550-66 by the Albanian architect, Mimar Sinan Agha, after the plan of St. Sophia, and is one of the finest examples of his work. The dome 15 feet across, is higher than its great model, while the interior is marvel of decoration.

any draught may berth. Two floating bridges span the inlet, thus connecting Stamboul with Galata-Pera. The lower one, the New or Galata Bridge, serves also with additional side pontoons as a pier for Bosphorus ferries and other local craft. The upper bridge, which is very little used, is the Old Bridge or Azab Keupri, or Mehmed Bridge.

The mouth of this inlet forms one of the most remarkable and picturesque harbours in the world. A thousand sails sway gently, or take their fill of

to danger, as if they were harnessed oven of the sea.

The most important places on this remarkable inlet are Galata-Pera, already described, Kassim Pasha, a disreputable suburb presenting, in the old Turkish dockyard, a melancholy picture of ruin and neglect, Fanar, on the other side of the Horn, and chiefly interesting as the seat of the Orthodox Oecumenical Patriarchate, Balat, a Jewish quarter situated a little beyond Fanar almost opposite Khas Keui and



QUAYSIDE MOSQUE OF ORTA KEUI BY THE BOSPORUS

On the steamer trip from Galata up the Bosphorus one passes the little suburb of Orta Keui which stands on the angle of a bend in the channel and marks the spot where the roofs and the walls of the city are last seen astern. There are lovely gardens to visit, and the mosque, built in 1870, while on the wharf there are cafés where, after Ramadan, the fun is fast and furious.

the strong east wind and bear out to sea, narrow, cushioned row-boats cut swiftly through the shadows cast by Transatlantic liners, warships look sedately grim from their favoured places, gaily-painted caïques, in shape but little altered from the ancient Argo, pass and repass with a genial disregard of modern science. Like dragonflies, swift motor-launches dart among the maze, while lumbering barges, laden, perhaps, with the city's accumulated garbage, move impervious

inhabited by Jews and Armenians, Eyub, a delightful Turkish quarter, and the Sweet Waters of Europe, a popular pleasure ground.

The Golden Horn is where it is, and as important as it is, because of the Bosphorus, that historic waterway which links together the Sea of Marmora and the Black Sea and provides the only all-year-round ocean passage between Europe and Russia. Its length is nineteen miles and its greatest width only a little over two miles. Its



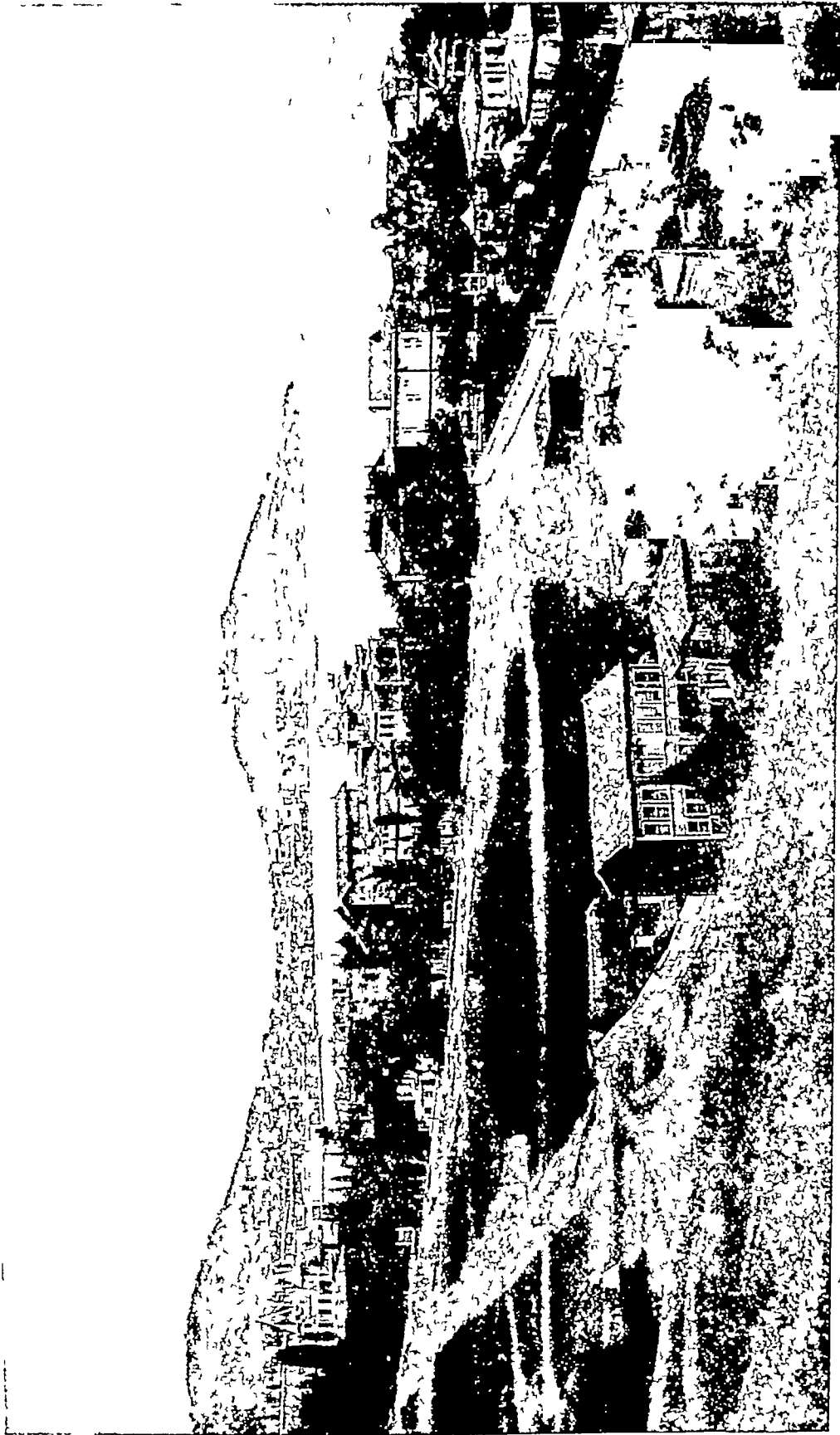
MOSQUE OF YENI VALIDEH AT THE END OF THE PONT NEUF

Where the Grand Bazaar meets the junction of the Bosphorus and the Sea of Marmara, the New Bridge spans the city. It is just below the old city wall. At either end are large landing places for boats. The bridge is a fine example of the old Turkish architecture. The mosque whose minaret is seen in the background is the Sultan's Mosque, completed in 1593.



GRAND BAZAAR WHOSE GLOOM AIDS THE SALE OF INFERIOR GOODS

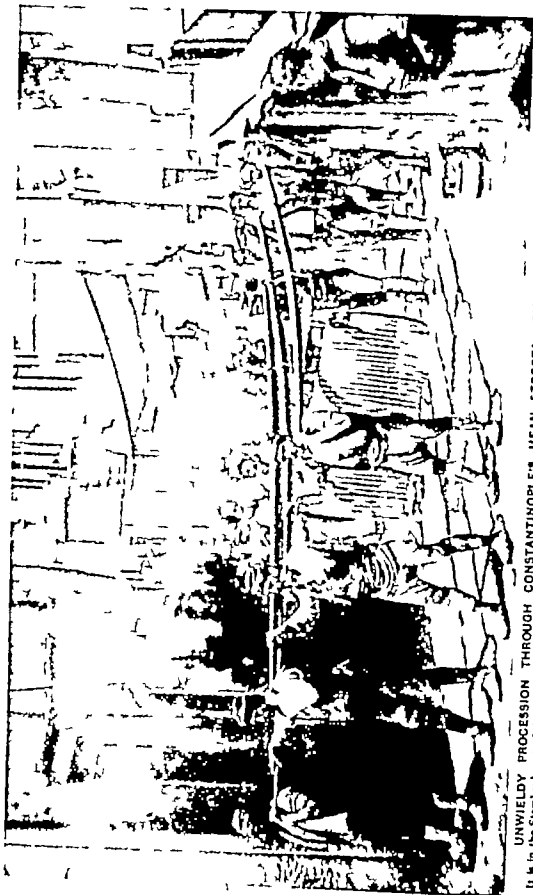
One of the show places of the city is the Grand Bazaar of Stambul, not far from the southern end of the New Bridge. Forming a separate quarter, which access is given by gates, the Bazaar lies in a hollow near the mosque of Huri Oussaleh. Parts are old, and the Valideh Ham dates from the seventeenth century. Most of the buildings, however, were rebuilt after the earthquake of 1891.



E V A

SEA OF MARMORA FROM PRINKIPO, CHIEF OF THE PRINCES' ISLANDS, IN THE LOVELY GULF OF ISMID

Off the shores of the beautiful gulf of Ismid lie the Princes' Islands. There are nine of them, four being uninhabited, and they are about 12 miles from Constantinople. This photograph was taken on the largest, Prinkipo, a resort of trippers, containing the capital of the same name. Across the water is Halki, with its twin hills, and in the distance are the hazy outlines of Proti, where the excursion steamers call. The islands are extremely attractive with their red cliffs and are famous for a pleasant climate, though one, Ovia, will ever be associated with the horror of the pariah dogs from Constantinople marooned there in 1910 and left to die.



UNWIELDY PROCESSION THROUGH CONSTANTINOPLE'S MEAN STREETS EIGHT MEN TO CARRY A BARREL

It is in the Istanbul part of the city that most of the Turkish population lives. The mass of narrow, steep streets, the little squares, the people, the dirt and the complexity of orders are much what they were a hundred years ago. The street in Pera or Galata, however, are of the only kind that one sees, for the local fire engines are armed with water, but, however, it is a jump in time.

general direction is from north-north-east to south-south-west, it varies in depth from 20 to 66 fathoms and the speed of its current averages about $2\frac{1}{2}$ knots, save in the narrows and at windings, which produce many counter-currents and whirling eddies. The north-east winds of the Black Sea are held chiefly responsible for the fact that this current sets in almost invariably from the Black Sea to the Marmora, it has been known, however, to run in an opposite direction.

Along the Shores of the Bosphorus

An abundance of fish, including tunny and luffaire, which are peculiar also to the Marmora and Mediterranean, is found in the Bosphorus, over its waters skim the gulls familiar in Western ports, as well as a species known as the Levantine Shearwater. These are small thrush-like birds that seem to be for ever restlessly upon the wing, flying close to the surface of the sea in what appears to be an endless chain.

On the European shore of the Bosphorus there are fifteen stations, on the Asiatic side thirteen. They can all be visited by ferry-steamer, which is more practicable and comfortable than by road, and many are both historically interesting and naturally beautiful. Bebek, where there is an English and American colony, Yenî Keui and Therapia which contain the summer residences of several ambassadors. Biyukdere and Beikos—all are resorted to in summer. Both shores are lined with palaces but the Asiatic side presents a striking contrast to the opposing shore, both in vegetation which is more abundant and in the character of its villages which are more strictly Oriental.

Stream fed Belgrade Forest

There is, however, on the European side a fairly considerable forest. It is known as the Belgrade Forest, is reached from Biyukdere and stretches thence to the vicinity of Lake Derkos. Its trees, which are chiefly oak and chestnut but include some beech

plane tree and pine, do not reach any considerable height. That portion which is actually forest is about 17 miles in circumference and harbours pheasant and roebuck, while the streams which thread it provide a refreshing greenness and assist the little cultivation by which the area is characterised.

Let us now briefly observe the climatic conditions and what results therefrom. The seasons in Constantinople are much the same as in England, that is, spring from April to June, and summer thenceforward to the end of August, followed by a delightful autumn which usually resolves itself into winter somewhere about the middle of November. It is, on the whole, a healthy climate, though damp and fitful, being subject to irksome variations of temperature especially in winter when bitterly cold days frequently alternate with days that are warm and, on occasions, sultry. Conditions such as these render five months of the year—November to March—dangerous to people of sensitive constitutions.

Dangerous Variations of Temperature

The average temperature in winter is 53° F for Stamboul and 55° F for Scutari, but it frequently rises well over sixty or drops to freezing point. Snow is by no means infrequent and has been known to fall so heavily in January as entirely to disorganize traffic for several days. The average summer temperature is 99° F for Stamboul and 103° F for Scutari, but this fairly high average is created by the intense heat usually experienced in July and August when the thermometer frequently for several days at a stretch leaps over the 100 mark. Finally, those in search of a mild climate should not choose Constantinople in winter when run sleet and blizzard transform it into a very trying, dull and dirty city. May, June and September may, however, be relied upon to provide almost faultless weather.

The climate is, therefore, more or less continental. It is not the



DIRT AND DILAPIDATION IN A BAZAAR OF STAMBOUL

There are miles of street in the Bazaar quarter of Stamboul, many covered over and most of them crowded and unclean. Only the poorer citizens frequent these; the wealthy expecting the goods to be brought to them. Of foreigners, there are plenty being escorted by dragomans to the shop of some dealer of antiques fresh from the factory while every kind of article may be found in its own street.



GRANDE RUE IN PERA, THE PRINCIPAL BUSINESS STREET

The Grande Rue runs right through Pera and follows the watershed between the Golden Horn and the Bosphorus for about three quarters of a mile to the Place Taxsim—the name means water station—which is close to the Park Taxsim. This street was almost entirely destroyed in the fire of 1870, which accounts for the comparatively fine buildings in it that replaced the Turkish houses

temperature one would be justified in expecting from a city in Constantinople's latitude, it is colder than Marseilles which is on the same latitude, and colder even than Trieste which is farther north. The prevailing wind is north, and comes down from the Black Sea. In January, February and March it frequently comes with startling vigour, in the form of blizzards which, fortunately, often blow themselves out in an hour or two.

The various races that make up the people of Constantinople are so clearly defined that one cannot detect any common traits due to the climate.

Their occupations are those of any great ocean entrepot. Shipping, warehousing, shopkeeping and tributary trades form the bulk of the city's commerce, and the merchandise which comes to its ports is that which is familiar the world over—wool, timber, wheat, silk, oils, hides, mohair and so on, with little that might be called unique. The district around Constantinople is chiefly given over to market gardens which provide the principal portion of the city's food. There are factories necessitated by the railways and tramways of the city and a few others for the production of glass and soap, and it is estimated



GALATA TOWER FROM BEYOND THE NEW BRIDGE

On crossing the New Bridge from Stamboul to Galata one comes to this square and to the steep slope which leads to the Yalovak district which lies up toward the old Galata Tower. The tower built by the Genoese I had been settled in Galata by the Emperor Palaeologus. During the siege by the Moslems they helped him in the last days of the city.

that if the required commodities of coal and raw materials were forthcoming the existing works of Constantinople would be able to produce twenty five tons of metal products a day.

This description of Constantinople brings me naturally to the European area it dominates which is a unit politically and geographically because it is defined on the west by the river Maritza on the north by a line of protecting hills and on the other two sides by the sea. It is composed of a series of undulating plains which more or less form one large plateau falling gradually from the Istranja Mountains on the

east to the Marmora and the Aegean and is thus a compact naturally strong division. Its short frontiers are their own defence—river, mountain and sea—and its chief city Constantinople at its south-eastern corner is shut off if need be from the rest of Europe while in a position to draw its supplies from the mines and gardens of Anatolia.

The western frontier of this area has undergone some modifications in past years but the Conference of Lausanne in 1922 restored to Turkey its natural western boundary the Maritza river. Thus the whole area remains a compact unity welded together by masses of

gneiss and granite which uprise to form the range of the Istranja Mountains. This great feature begins in south-eastern Bulgaria and then runs southward as a high wall directed towards the Black Sea, steadily rising till it culminates in Büyük Magliada (3,395 feet). Its direction is then south-east along a line which varies from twenty-one to eight miles from the Black Sea.

Configuration of the Istranja

When it reaches the vicinity of Kara Tepe it throws out an arm south-westward which is continued along the Marmora coast into Gallipoli, but its own course lies south-eastward to form the Chatalja Peninsula, which has Constantinople at its extremity.

The Istranja descends more gently on the south-western side. Where it forms the Chatalja Peninsula it is, behind what are known as the Chatalja lines, an irregular plateau riven by parallel valleys. Where it faces the Black Sea it continues to render the coast almost inaccessible, but on the Marmora side the shore is indented by river mouths that form valuable estuaries.

When the Istranja reaches the vicinity of Kara Tepe there begins a series of hills which include the Tekfur Dag, the Kuru Dag, Yaila Dag and the hilly chalk and sandstone region of the Gallipoli Peninsula. Their direction is to the Sea of Marmora, near Rodosto, whence they spread west and north to form an uneven plateau. Tekfur Dag is separated from the area of Kuru Dag by the Sayan Dere, which later flows into the Gulf of Xeros as the Kavak Dere. Both these regions are higher than the third, the Yaila Dag, which is enclosed on the west by the Ergene-Maritza junction and on the east by the headwaters of the Ana Su.

Water-scarred Gallipoli Peninsula

The fourth region is the Gallipoli Peninsula, which runs from Bulau at the north-eastern end to Sedd-el-Bahr at the south-western end, a distance of 47 miles. It varies in width from

about twelve miles to three miles and is separated from Anatolia by the Dardanelles. The hills in the interior of this region are of chalk and sandstone, which the action of winter streams has cut into deep ravines. The north ridge, running south-west to north-east, maintains a series of heights in the vicinity of 1,000 feet, culminating in a peak which rises to 1,398 feet. On the Dardanelles side the heights, commencing with 147 feet at Sedd-el-Bahr, rise gradually to 997 feet just east of the Chamli Dere.

There is no navigable river in Thrace, if we except the very restricted opportunities of the Maritza, which can be penetrated by barges as far as Adrianople. From Adrianople southward its course is for about 90 miles, during which it is subject to a slight fall. Its main channel meets the sea at Enos, where it is flanked by salt lagoons, but its chief port is Dedeagatch.

Weather Sequence in Thrace

Just west of the Yaila Dag plateau the Maritza receives the Ergene, which, rising west of the Istranja Mountains, drains the great central plateau of European Turkey. Where the Maritza turns west, at Adrianople, it is joined by the Tunja, which, after flowing for most of its course through a deep cleft, widens to form the basin of Adrianople.

Actual scientific data concerning the climate of Thrace are meagre, but ordinary observation establishes pretty clearly the sequence of the weather, which is not much varied from year to year. Spring begins in April with a considerable diminution of the winter rains, the climate then slips, without more ado, into the dryness and dust of summer. These summer months, from the middle of May to the end of August, are, however, frequently diversified by very heavy thunderstorms.

The winter is the rainy season, and wet weather makes its appearance as early as September, creeps more forcibly into October and November, reaches its zenith in December and January,



CONSTANTINOPLE *Rare marbles from all over the Roman world*
church S. Sophia *This is the gallery at the base of the dome*

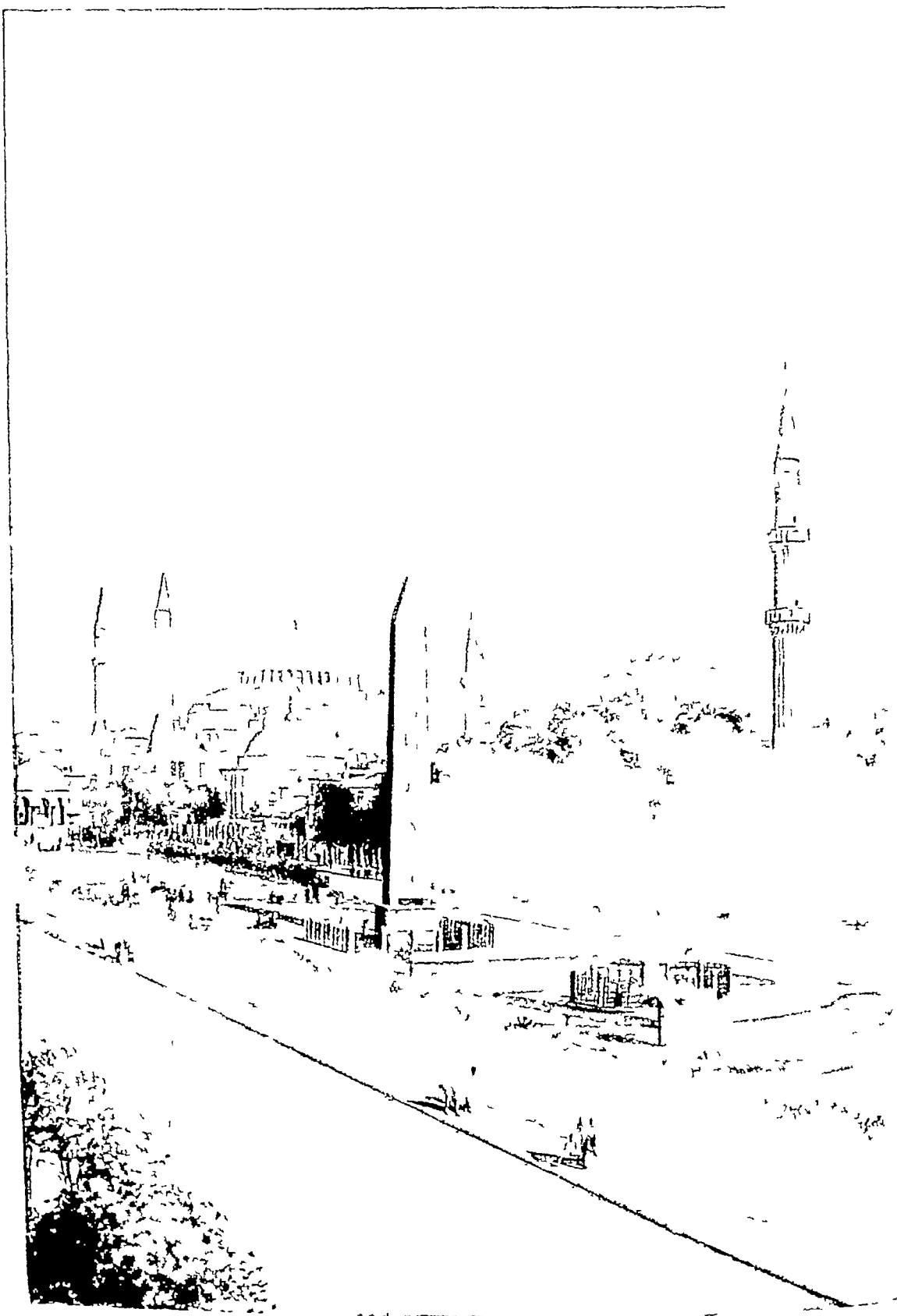


CONSTANTINOPLE *Dark cypresses stand among the tombs at the cemetery of the most holy Mosque of Eyub by the Golden Horn*

Underwood



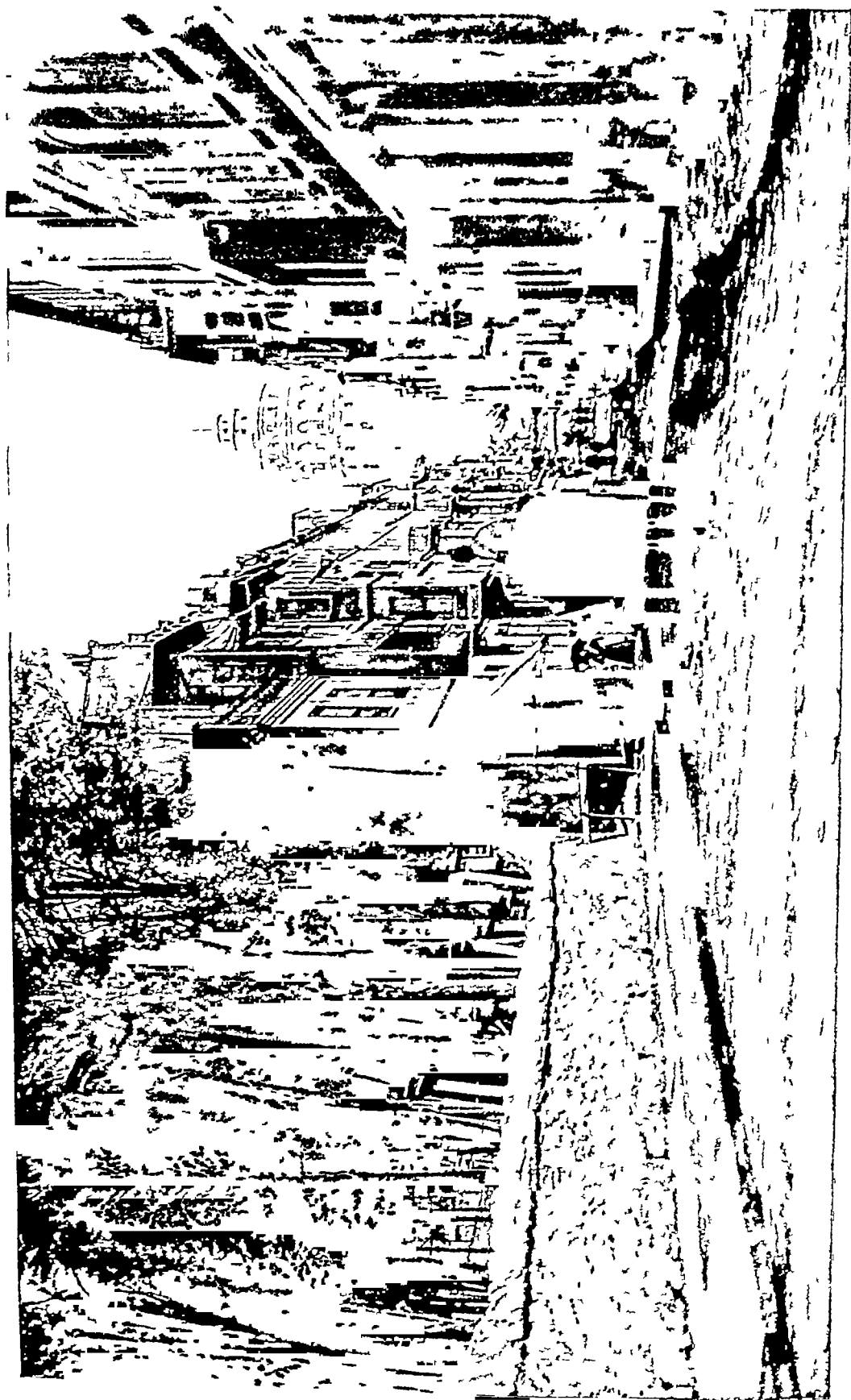
CO STANTINOGLI. In the main street of Scutari, the suburb over the Bosphorus is the *Buyuk Jami* or Great Mosque built in 1511.



CONSTANTINOPLE *This is the Atmeidan on the site of the old Roman hippodrome, where two obelisks still mark the chariot course*



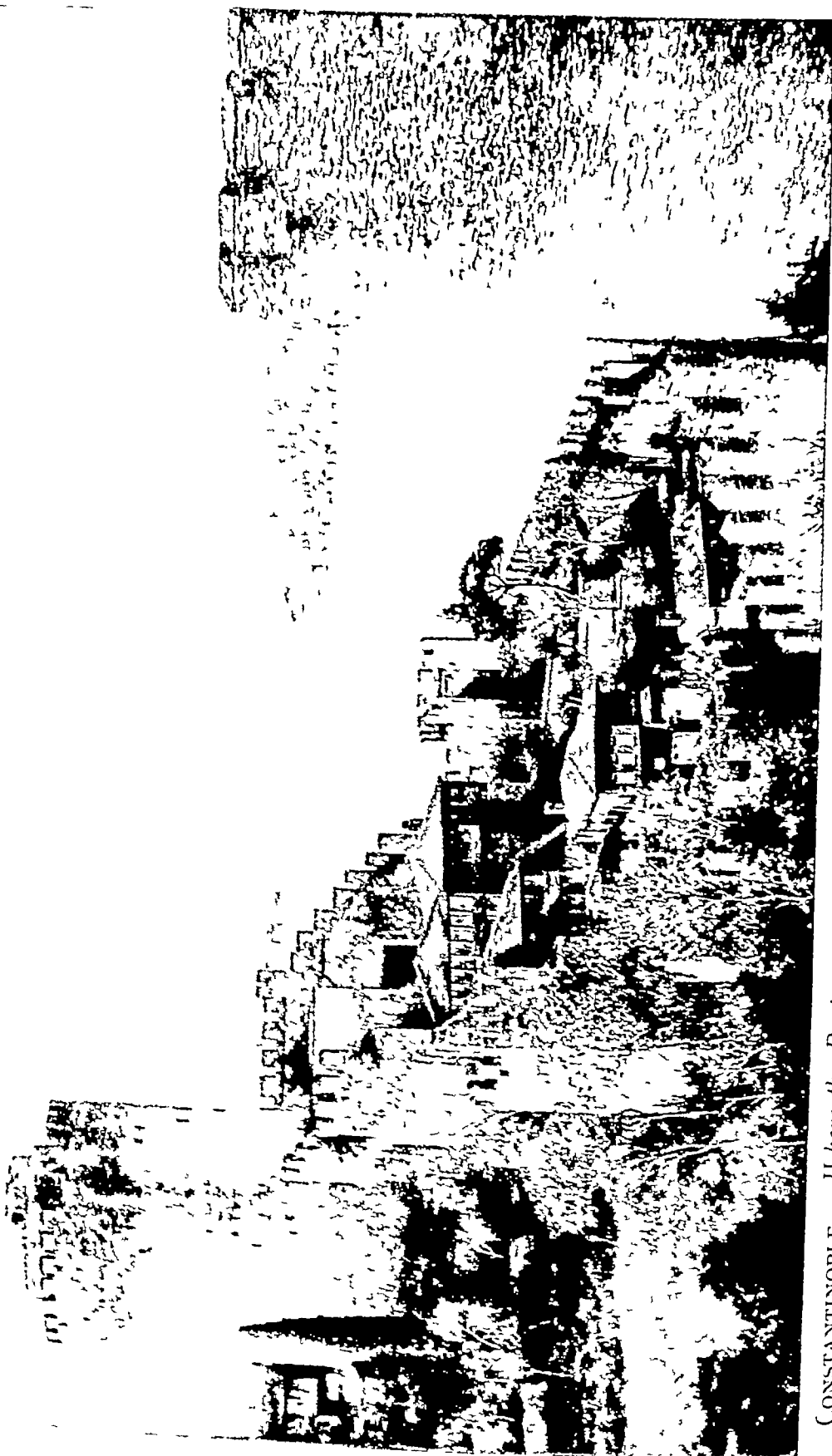
Behind is the Mosque of Ahmed with S. Sophia on the left the church founded by Justinian in 532 and made a mosque 900 years later



CONSTANTINOPLE Marking the intersection of the east and west walls of Galata as they stood in the fifteenth century, the Galata Tower, built by the Genoese, 148 feet high, affords the finest view of the city



CONSTANTINOPLI. On a hill overlooking the Sea of Marmora the visit to the ruins of Constantinople through the Bank Mc arisan the largest of the Mo lem cometen with its curium Ar Th il l on s



CONSTANTINOPLE. Here the Bosphorus narrows to 722 yards the increased current is called the Devil's Stream. The towers of Rumeli Hisari, built in 1452, face the fortress of Anadolu Hisari on the Asiatic shore.

and maintains a fairly even average until April when it expires in fitful showers.

The vegetation in such a climate in an area freely watered by innumerable small streams and with a soil that is often of a tanning fertility should be rich and abundant but is actually nothing of the sort. The agricultural and pastoral opportunities have been woefully neglected save for one or two futile misbegotten attempts by the old administration to foster industry and indeed there has been no serious attempt to exploit even the least and most easily coaxed of the resources.

At present the country between the river Ergene and the Tekfur Daglı produces more grain than is required for its own uses and Rodosto under normal conditions exports over £300,000 worth. In the region of the Istranja Mountains sufficient oats, wheat and maize are grown to supply local needs; a numerous quantity of livestock is also maintained. The central plains including the Mantza valley which is "as little cultivated as it is naturally fertile" have a number of mulberry orchards, some timber in the region of Enos, large cattle and buffalo herds near Ipsala and considerable grain in the district around Adrianople and in the hazas of Havsa and Rodosto.

Gallipoli is chiefly agricultural and pastoral though sparsely inhabited and little cultivated in the south west corner. Its only town of consequence is Gallipoli which supports a flour

mill with Mallos farther south growing rapidly because of the industry of its Greek farmers, pastoralists and fishermen. This peninsula is not so barren as is usually supposed and could support a very much larger population.

With the exception of the main artery connecting Constantinople with the west via Adrianople the roads of Turkey are execrable almost all of them being merely cart tracks or bridle-paths which in winter frequently lose their identity in muddy swamps. Metalled roads connect Adrianople with Chirli and Constantinople, Baba Eski and Kirk Kilise. There is a metalled road from Rodosto to Ferizlik and a second one to Muradi and another between Bynk, Chirkmeje and Derkos.

The main railway line of the country also connects Europe with Constantinople via Adrianople and there are branch lines from Baba Eski to Kirk Kilise and from Kuleli Burgaz to Dedegatchi. But here also there is room for great improvement in order to enable produce which is transported in primitive fashion to reach a market with relative cheapness.

Given good communications a little more ambition and industry in the inhabitants who are inclined to be very lazy and up-to-date methods of farming Thrace could achieve a prosperity that would very soon raise its chief city almost as high in the sphere of commerce as it always has been in the sphere of politics.

CONSTANTINOPLE GEOGRAPHICAL SUMMARY

Natural Division. Passage way between the Balkans and the Asiatic plateau of Anatolia. The coastlines bear evidence of the foundering of adjacent masses. (Cf. Crete). The Bosphorus and Dardanelles are comparatively recent—i.e. geologically—fractures in the earth's crust as is still indicated by the parallelism of their opposing shores. The lower Mantza valley now smaller than in earlier times dates from the tertiary period.

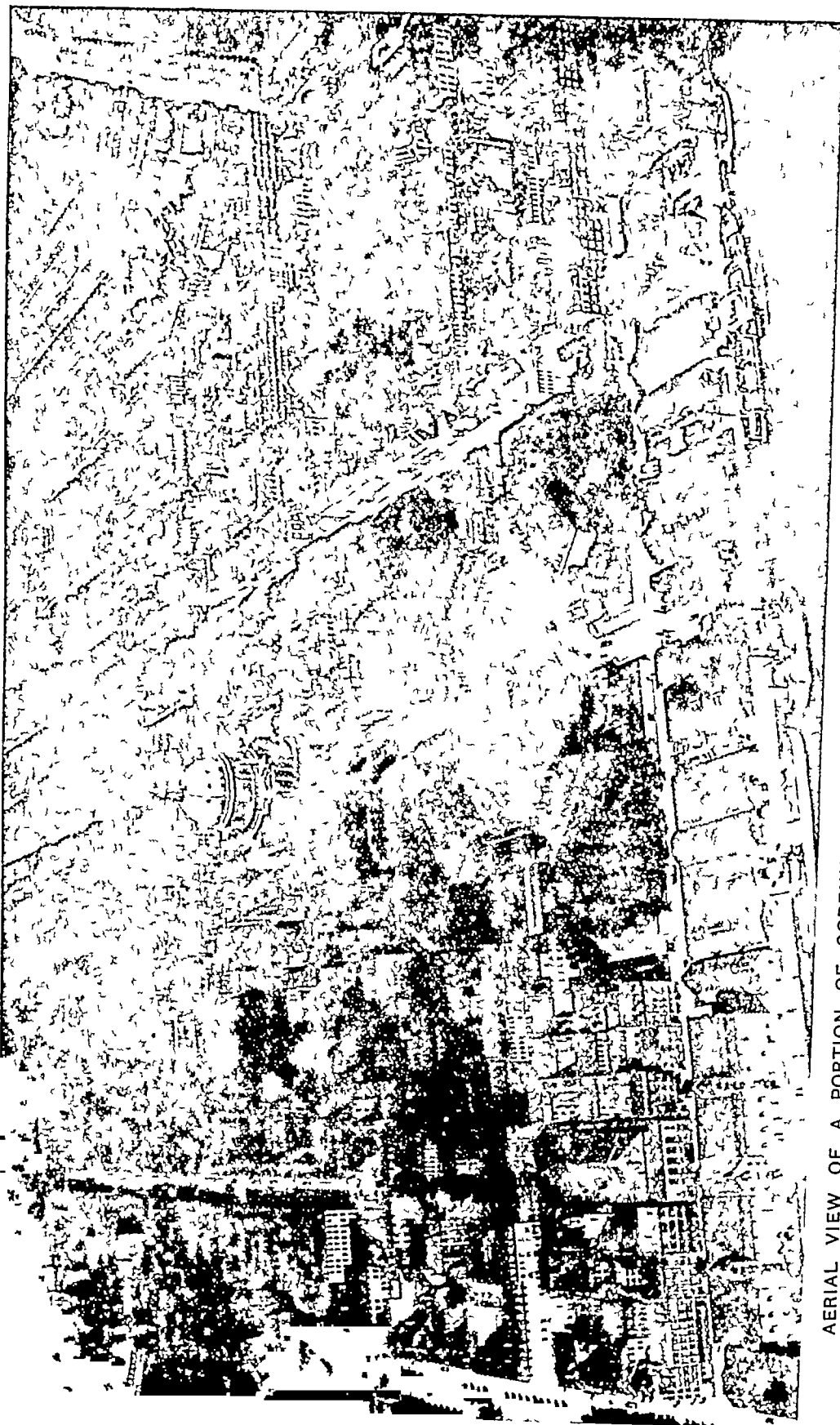
Climate. Mediterranean, dry, droughty summers from May to August, winter rains and snows from October to March, and short transition periods of spring and autumn. The area is a passage way for the continental winds from the Russian

steppes, especially the piercing dry winds that cause such bitter cold in winter.

Products. Cultivation is backward, the yield of wheat, maize and oats could be increased, cattle rearing could be improved. Timber, silk, grape-produce might become valuable under careful and systematic development.

Communications. Railway routes necessarily centre on Constantinople, the Orient Express, the Berlin Bagdad scheme. The sea route inevitably implies the free navigation of the straits.

Outlook. Everything depends upon the removal of the blight caused by the Dead Hand of the Turk.



AERIAL VIEW OF A PORTION OF COPENHAGEN, SHOWING THE GREAT DOME OF THE FREDERIKS KIRKE

Although an ancient city, Copenhagen presents quite a modern appearance, for owing to several severe conflagrations the older wooden buildings have been swept away and their sites occupied by substantial brick and stone edifices. Over 600,000 persons have their homes in this animated centre of Denmark's life, which comprises several suburbs and is dignified by numerous noteworthy buildings. In the foreground of this photograph lies the octagonal Plaza of Square embellished with a bronze equestrian statue of Frederick V and enclosed by four uniform buildings—one of which is inhabited by the king—I know as the Amalienborg Palace.

Aerofilms

COPENHAGEN

Denmark's Pleasure Loving Capital

by Frederic Whyte

Author of "Gothenburg" etc.

COPENHAGEN for most of us is and will always be the city of Hans Andersen although he was not born there but in the more ancient town of Odense. His biographers have not been of one mind as to how far the creator of the Ugly Duckling was thinking of himself when he wrote that immortal little story but beyond question it reflected most aptly his own career. The awkward ragged-looking unprepossessing boy who journeyed to Copenhagen a little more than a hundred years ago and who as he tells us made straight for its famous theatre walking round and round it gazing at its walls wistfully wonderingly not altogether unhopely as at a home some day perhaps to be open to him—that quaint ugly duckling of humanity was to be Copenhagen's most illustrious citizen.

We cannot dwell here upon Hans Andersen's experiences in the capital—they will be found recorded in his autobiography but just as no one can claim really to know London who has not made himself familiar with the haunts of such great Londoners—born or bred—as Lamb and Johnson Dickens and Thackeray Keats and Carlyle so no one really knows Copenhagen who cannot look at it through the eyes of the ingenuous young pilgrim of genius who arrived in it in September 1819.

I the Tracks of Hans Andersen

Ingenuousness seemed his outstanding characteristic and there is no guessing what misfortunes might not have encompassed him had he not been a favourite of the fairies. It was just like him to seek his first lodging in the Ulkegade the street of worst repute in the whole city and to give his heart at

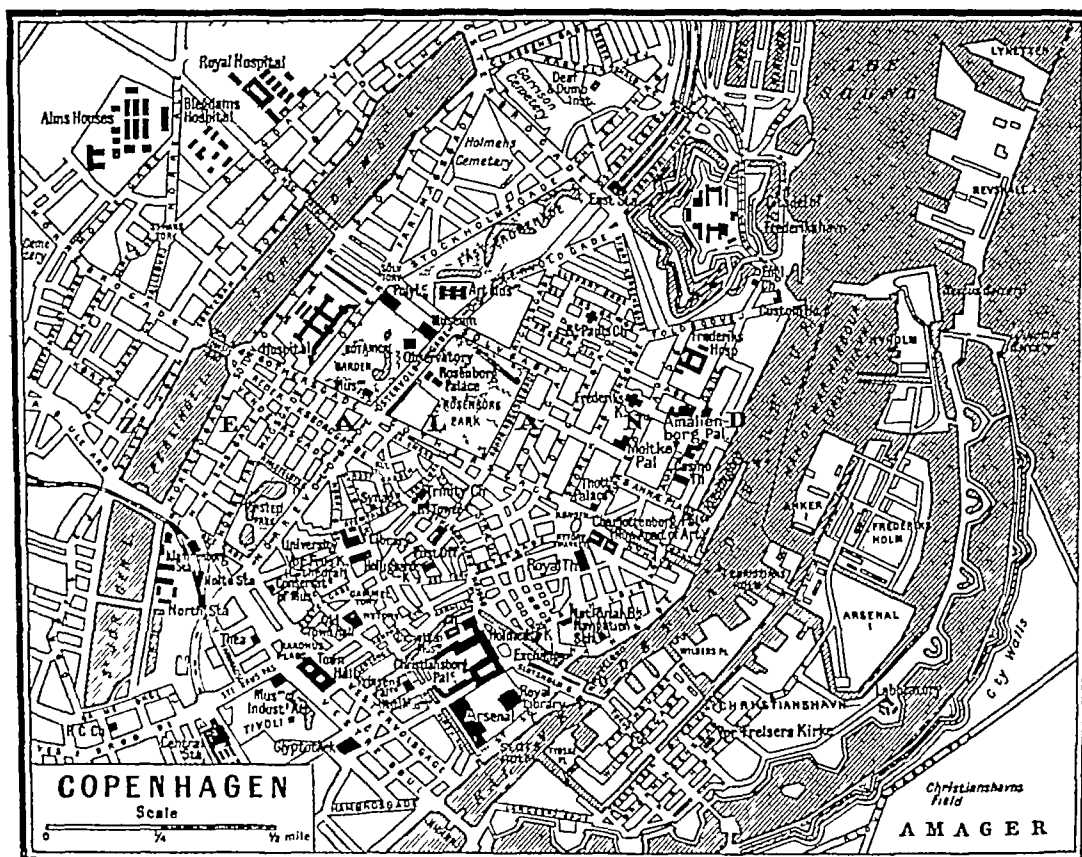
first sight to the shy old landlady who was presently to fleece him. No more delightful plan could be devised for exploring the Copenhagen of to-day than first to seek out that historic site and proceeding thence to the Royal Theatre to visit one by one the principal scenes of Hans Andersen's adventures.

A Capital Without Competitors

To a greater degree perhaps than any other city in Europe Copenhagen is the main prong of the country of which it is the capital. In almost all other countries there is at least one second big town which makes the pace for the capital or which in some important respect challenges comparison with it as Glasgow does with Edinburgh or Gothenburg with Stockholm but in Denmark Copenhagen stands unrivalled and supreme. It is the seat of government and the headquarters of the army and navy here the king lives and holds his court here is the university and as its very name suggests—for *Kjöbenhavn* means Merchants Harbour—here is the very centre of Denmark's extensive commerce.

The city is very pleasantly situated. It lies partly on the quite flat eastern shore of Zealand partly on the northern extremity of the small island of Amager separated from Zealand by the narrow arm of the sea which forms the city's harbour. This south-easterly portion of Copenhagen is called Christianshavn. Although it has in it much to interest most visitors leave it unexplored. The rest of Amager is noteworthy above all for its wealth of fruit and vegetables. It is Copenhagen's kitchen garden.

Until 1863 Copenhagen was confined inland within fortifications, but since



COPENHAGEN LIKE A SECOND VENICE AMID ITS CANALS

then it has extended in every direction and now includes, to the north and west, four extensive suburbs. To the north of the channel-shaped harbour a great "free port" was constructed in 1890-1894. The commercial quarter is located to the south and south-east of Kongens Nytorv, literally King's New Market, which is the heart of the city, with no fewer than thirteen streets radiating from it in every direction.

Kongens Nytorv, connected with the harbour by a canal-like extension flanked by picturesque gabled houses, is one of Copenhagen's oldest and most picturesque "bits." Northwards and eastwards of it are straight, wide, handsome, comparatively modern streets, conspicuous among them Gothersgade and Amaliegade. Amaliegade on its north-easterly way takes us to the Royal Palace, a symmetrical building in four equal parts of which one is inhabited by the King and two by other members of his family, the fourth being

used only for ceremonial purposes and comprising the coronation room. Parallel with Amaliegade is Bredgade (Broad Street), with the palace of King George of Greece and other handsome buildings, such as the one known as Moltke's Palace, which contains a fine collection of eighteenth century Dutch paintings. At their north-eastern end these two main arteries reach Copenhagen's old citadel, beyond which extends the city's beautiful and famous esplanade, Lange Linie.

Gothersgade, which makes at Kongens Nytorv a right angle with Bredgade, cuts off the whole of this spacious rectilinear, relatively new Copenhagen, with its parks and palaces (among them the palace called Rosenborg, which is now a really wonderful historical museum), from what we may call Copenhagen proper—the Copenhagen known to Hans Andersen—with its confusing network of narrow streets and winding alleys. Even this old

portion of the town is not so very old. Although its history goes back to the twelfth century when its site was presented by Valdemar I of Denmark to Absalon the famous bishop of Roskilde. Copenhagen has very little of the medieval city about it. Almost all its most ancient buildings perished in conflagrations or were destroyed by bombardment. Terrible damage was effected by British guns in 1807.

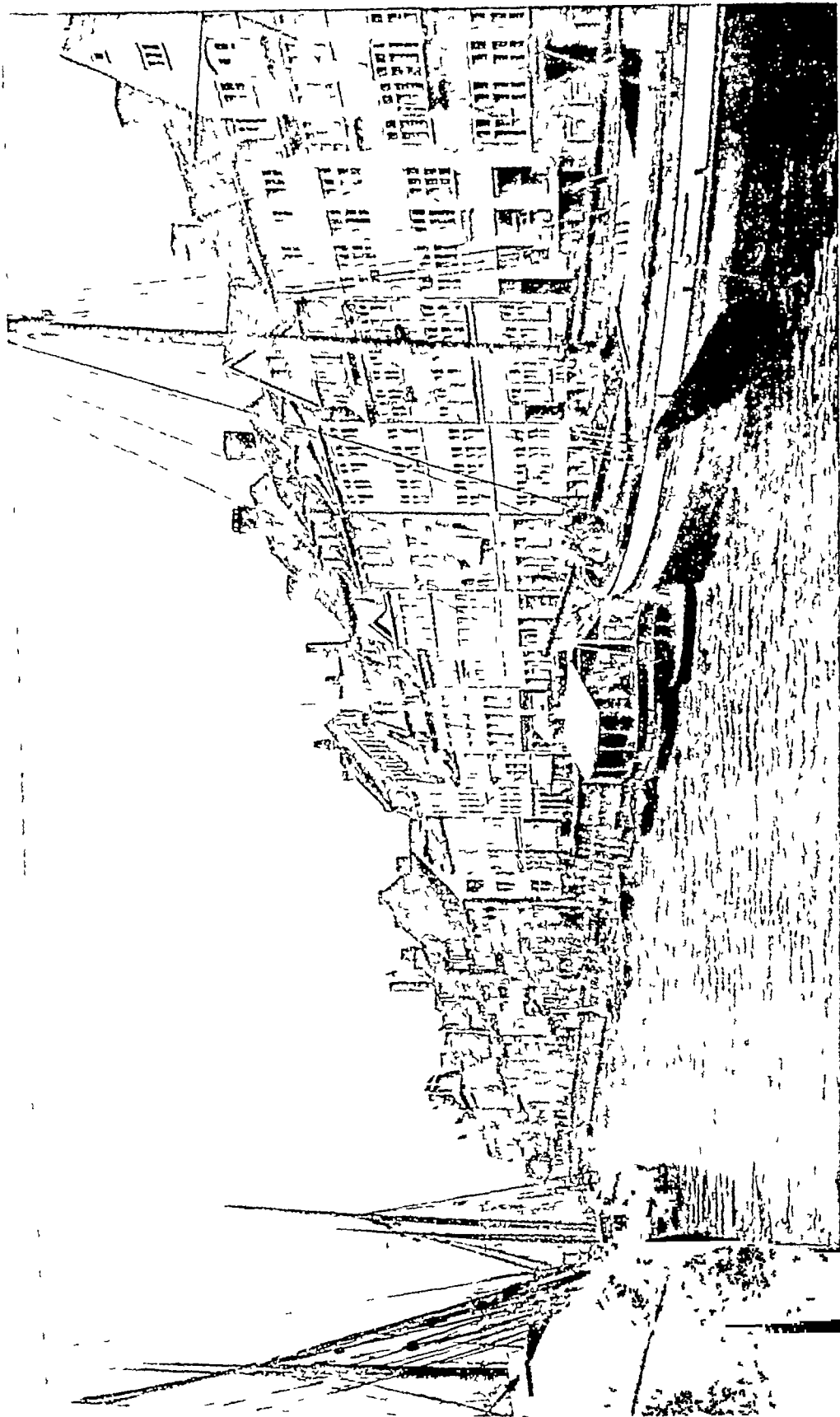
Kongens Nytorv itself dates from early in the seventeenth century. The palace of Charlottenborg, a massive rather dull looking edifice hard by which was devoted by Fredrik I to the

purposes of an academy of arts, dates from 1667. The street called Holmens Kanal which winds its way in a south westerly direction from Kongens Nytorv takes us presently over a bridge to the semi-oblong island Slotsholmen (Castle Island) upon which Bishop Absalon built his castle in 1167. A century later Copenhagen was again in royal hands, but it was not until 1731 that this spot was chosen for the erection of Christianborg, most magnificent of Denmark's royal palaces.

Christianborg was destroyed by fire in 1794 and was rebuilt, but it was burnt down again in 1884. In 1903 it was

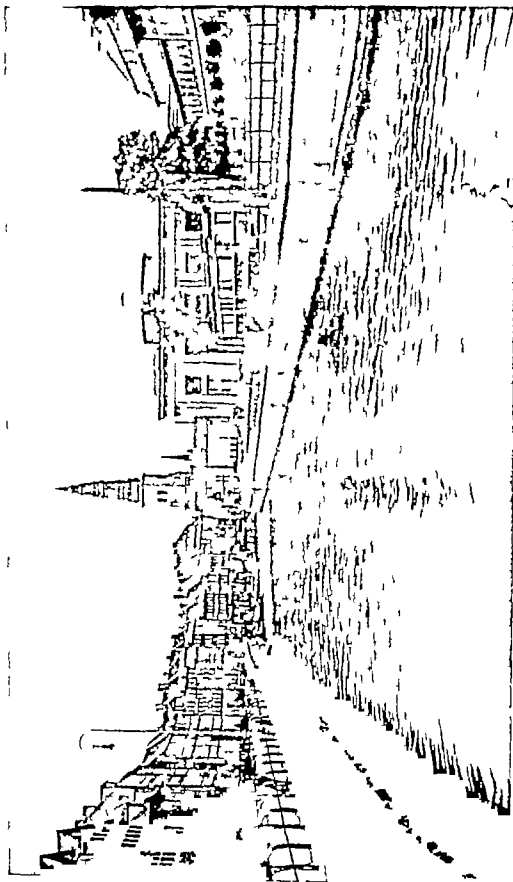


PLEASANT CORNER OF COPENHAGEN FROM THE TOWN HALL TOWER. Rådhus Plads, or Town Hall Square, the focus of the tramways, is one of the busy centres particularly for traffic between the inner town and the important suburb of Frederiksberg. This magnificent view is obtained from the 330 feet high tower of the new town hall, which stands on the south side of the square overlooking one of the most intensely active sections of the city.



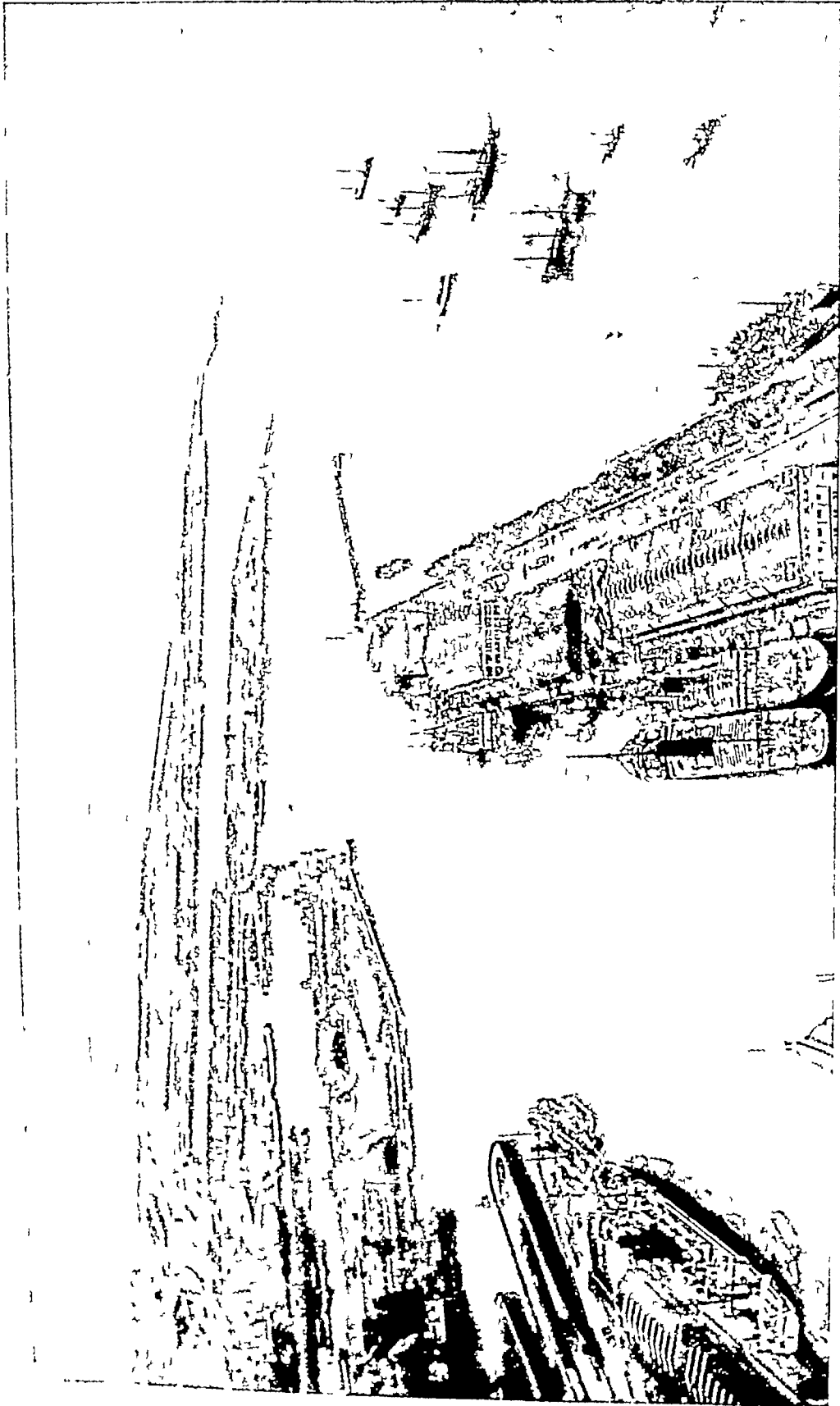
CANAL SCENE IN AN OLD QUARTER OF COPENHAGEN, THE COMMERCIAL CENTRE OF DENMARK

As the largest naval station of Denmark, Copenhagen has an extensive trade, and imports and exports more than all the rest of the kingdom put together. The most important industries include ship building, distilling, brewing, sugar refining, fishing and the manufacture of textile fabrics, porcelain articles, pianos, clocks and watches, and among the staple exports are dairy produce, grain, beef, hides, wool and coal. This is a part of Copenhagen's oldest and most picturesque quarter, and the substantial looking houses flanking the street overlook the canal like extension of the harbour which encircles Slotsholm



CANAL SEPARATING SLOTSKOLM FROM THE MAINLAND WITH THE THORWALDSEN MUSEUM ON THE RIGHT

Christiansborg Palace, a portion of which is here seen to the extreme right, occupies a large part of the Slot Island, or Castle Island, separated from the mainland by a narrow arm of the harbor. On the north-east side of the palace stands, directly behind the tower in the photograph, the Thorvaldsen Museum, a splendid structure in semi-Egyptian, semi-Roman style, containing a wealth of masterpieces of the great Danish sculptor, whose tomb lies in front in the center of the building. In the central distance is the Gamblestrand, near which numerous fishing-boats are moored while fish business is transacted in the fish market

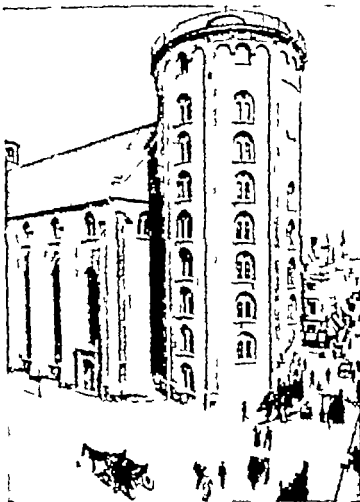


SURVEY FROM THE AIR OF A BROAD STRETCH OF THE SOUND AND OF THE NEW FREE HARBOUR OF COPENHAGEN
Copenhagen, the famous seaport and capital of Denmark, is situated on the eastern shore of the island of Zealand and on the northern extremity of the adjoining small island of Amager, which is separated from Zealand by the Kalvebodstrand, a narrow and deep branch of the Sound. To this waterway Copenhagen owes its prosperity in trade. It is divided into the commercial harbour and the naval harbour, while north of these and of the Citadel of Frederikshavn is found the new free port opened in 1894. Part of its eastern mole is seen above in the central foreground, showing, on the right, the Lange Linie Aerodrome.

decided to rebuild it once more one portion of it being set aside for the sovereign one for Parliament and one for the High Courts of Justice. To the east of this imposing new structure stands the Exchange dating from 1619-1630. This is one of the best preserved of Copenhagen's older edifices. It has a quite unique spire formed out of the entwined tails of four dragons whose heads point outwards north south east and west. To the south of the Exchange also on Slotsholmen is an arsenal containing a remarkable collection of ancient armour. On the other side of the island is the Thorvaldsen Museum with its semi Egyptian semi Etruscan exterior.

A ramble westward and northwards from Slotsholmen and its encircling canal will enable us to glance at the half dozen or so other buildings, old or new which no self respecting visitor can afford to miss first immediately in front of Christiansborg Prinsens Palais, now the National Museum notable chiefly for its ethnographical section then Copenhagen's cathedral Vor Frue Kirke (Our Lady's Church) restored in 1811-1829, with its Christ and Apostles by Thorvaldsen and, quite near it the university rebuilt in 1836 but with a history going back to 1479.

In the same neighbourhood is the Trinity Church with its Round Tower 111 feet high. This tower has inside it a wide spiral way up which Peter the Great is said to have driven in a carriage and four. It is Copenhagen's architectural curiosity. You will not spend

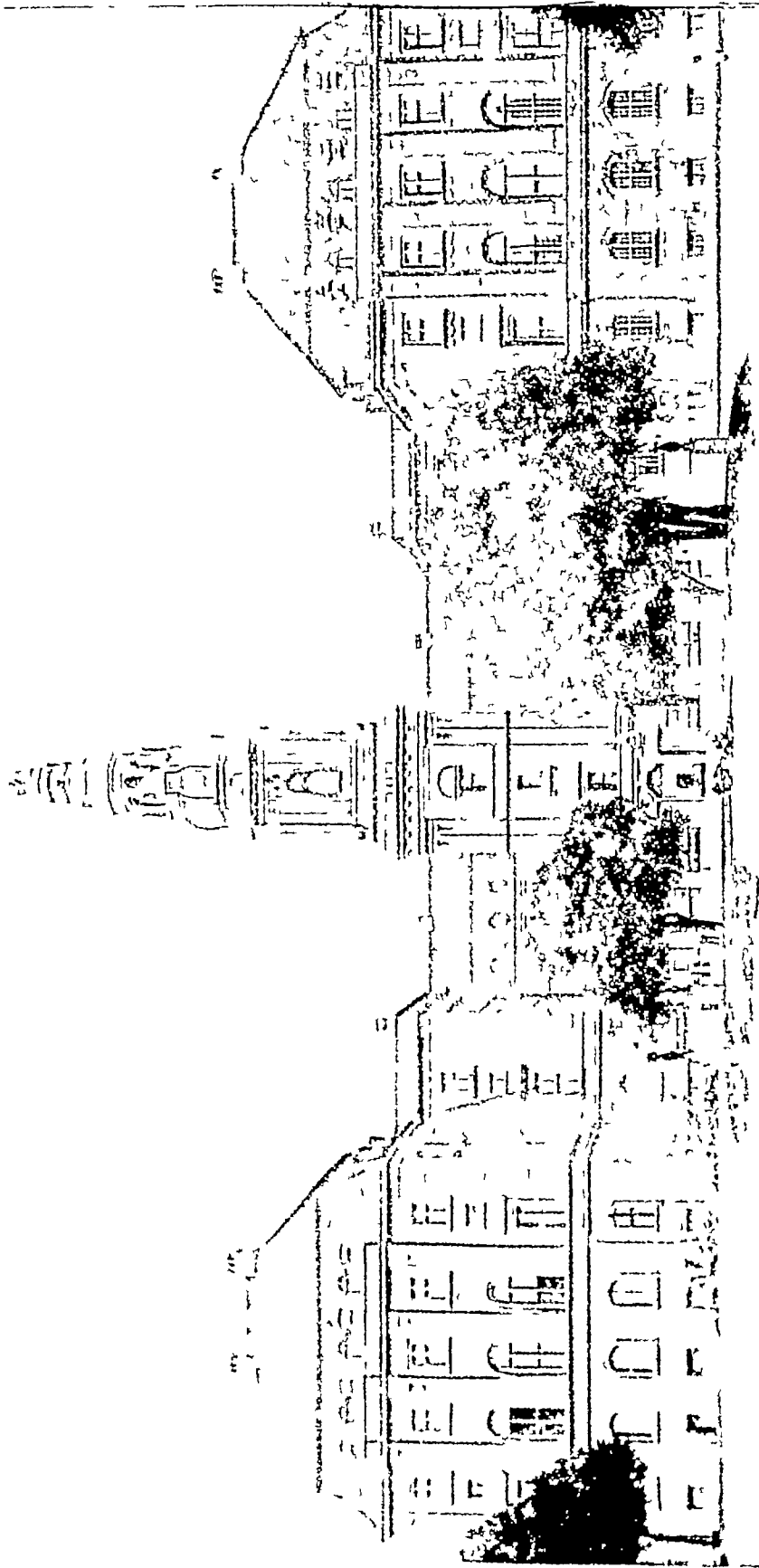


HISTORIC "ROUND TOWER" OF COPENHAGEN

Both the Church of the Trinity and its notable Round Tower are built in the reign of Christ III. The tower, 111 feet high, regarded Copenhagen architectural curiosity, is ascended by broad spiral way and commands an extensive view.

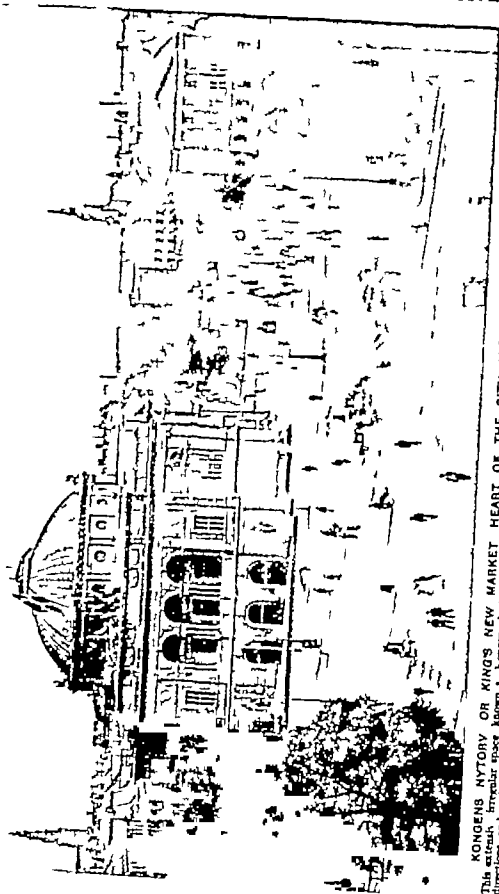
many hours in the city before someone asks you. Have you seen the Round Tower? When you have made acquaintance with all these buildings, and the new Royal Library in Christiansgade and the National Bank and the Royal Theatre (we are now returning eastwards again to the vicinity of Kongens Nytorv) you may claim to have almost done Copenhagen.

Almost but not quite. There are two important art galleries which have yet to be visited one of them in the modern quarter which lies north of Gothersgade the other known as the Glyptothek, to the west in the same region as Copenhagen's great central railway station and magnificent modern



HOME OF THE DANISH PARLIAMENT IN THE CENTRE OF THE OLDEST PART OF THE CITY OF COPENHAGEN

So far back as the twelfth century a castle reared its head on the fortified island of Slotsholm. Several centuries later, in 1731-45, the Castle of Christiansborg—the most magnificent of Danish royal palaces—was erected by Christian VI on the same site, but it was destroyed by fire in 1794. Rebuilt by Hansen, it was again partially burnt down in 1834. In the beginning of the twentieth century the palace was again rebuilt, and, although the actual residence of the king is at the Amalienborg Palace, the beautiful edifice of Christiansborg is used on occasions of state, while the imposing portion seen above houses the Parliament of Denmark.



KONGENS NYTORV OR KING'S NEW MARKET

This outdoor irregular space known as Kongens Nytorv is the focus of the life of the city. It is framed by many handsome buildings, including the tall by Royal Theatre tower in the south. The Commercial Bank with four-columned facade, and to the left is the gumpso of the tower. The scene is completed by an old and royal tower.

AND CENTRE OF MANY THOROUGHFARES

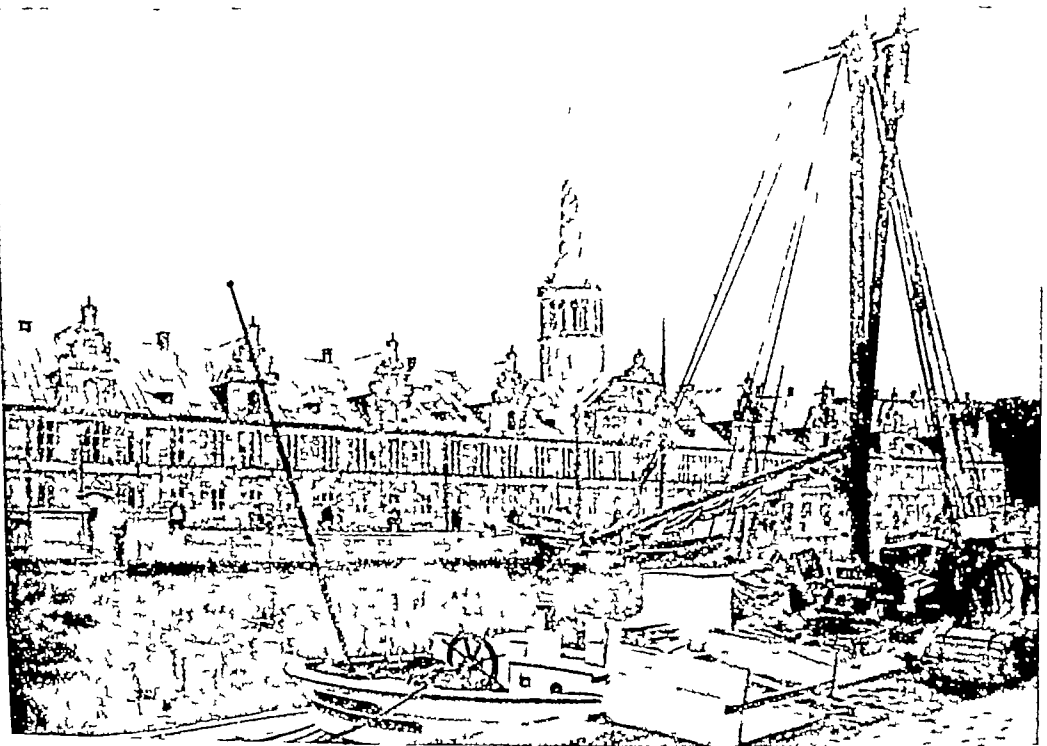
no fewer than thirteen streets all lining from it in various directions. The tall by Royal Theatre tower in the south. The Commercial Bank with four-columned facade, and to the left is the gumpso of the tower. The scene is completed by an old and royal tower.

town-hall and the world-renowned pleasure gardens of the Tivoli. In the Glyptothek is harboured the wonderful collection of works of art presented to Copenhagen by a wealthy brewer named Jacobsen, one of its most public-spirited and benevolent citizens. Quite close to it is a little gallery devoted to the arts and crafts of Denmark.

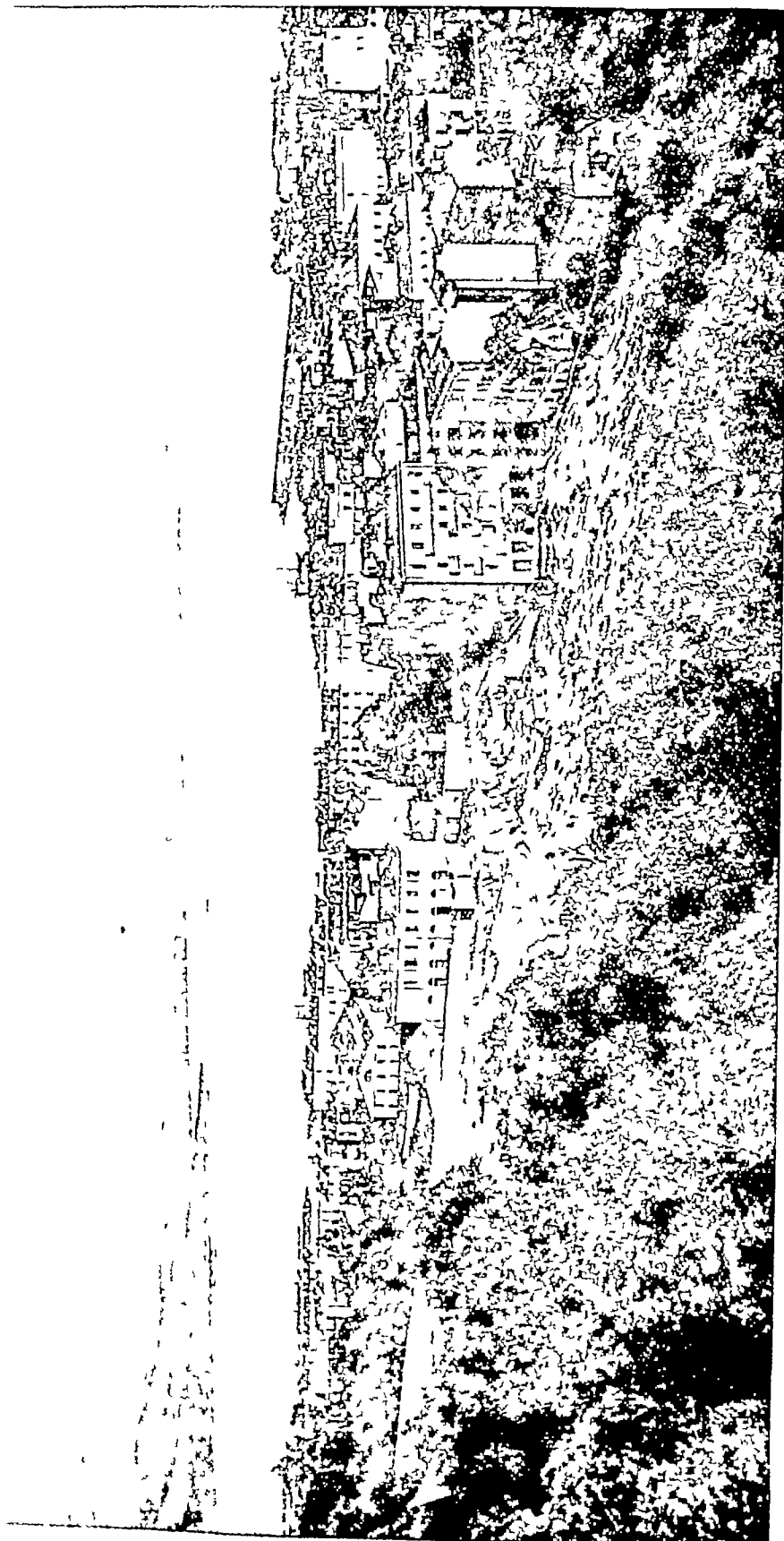
Architecturally Copenhagen is a city of individual and almost unrelated beauties. No single building stands out commandingly in it like the Royal Palace of Stockholm or like Cologne Cathedral or the Brussels Law Courts or the Belfry of Bruges. In addition to the stately palaces and churches and other structures of note which have been mentioned it is rich in charming nooks and corners, delightful glimpses of picturesque old walls and red-tiled roofs and semi-Venetian waterways. But there is no unity, and nowhere—not even from its Round Tower—do you get a satisfying view of it as a whole.

While Denmark is essentially an agricultural country and most of its inhabitants are wisely content with a healthy and prosperous existence upon the land, more and more every year the ambitious no less than the pleasure-loving are being lured by the capital. There are two very distinct aspects of Copenhagen life, and when asked to give a description of it one hesitates as to which of the two should be accorded the more prominence. Ought one to begin by talking about its clever people, old and young, about the university and its traditions, about the Royal Theatre and its high aims and fine achievements, about the admirable Danish schools? Or ought one to discourse rather upon the Tivoli and its thousand and one attractions, its cycle races and circuses, its ice-creams and coffee and cakes?

There can be very little question but that its Tivoli and dancing-halls and cafe-concerts constitute Copenhagen's

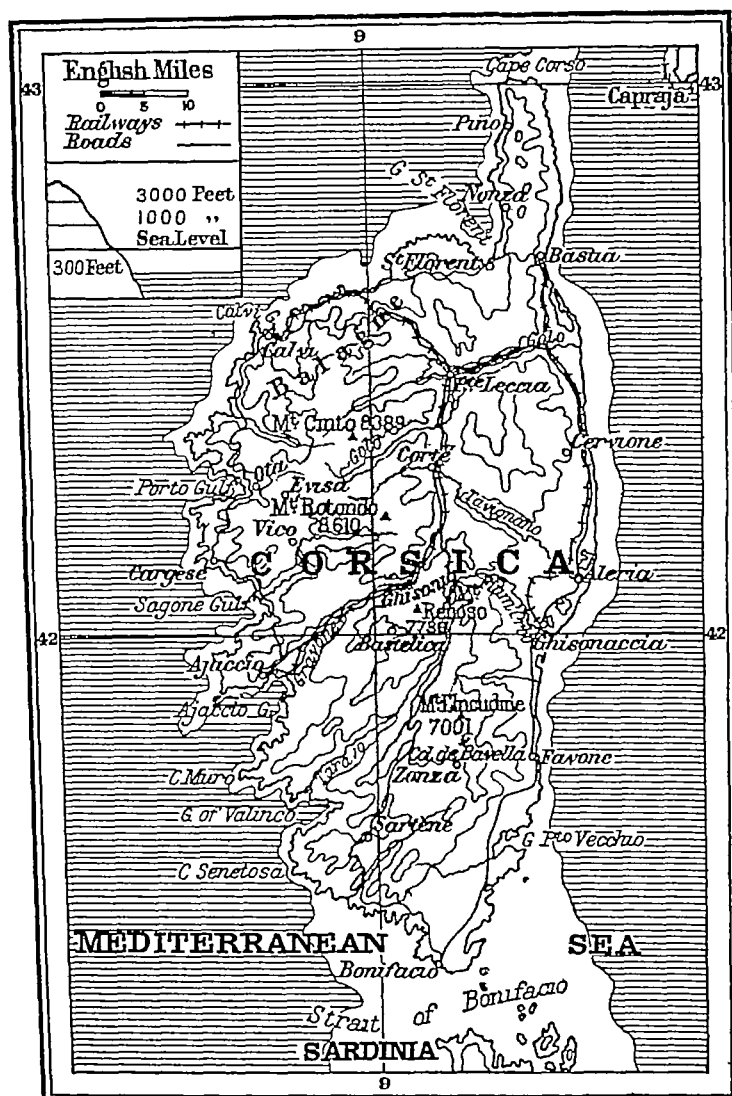


ONE OF THE BEST PRESERVED OF COPENHAGEN'S OLDER EDIFICES
The Exchange, a long, many gabled building erected in 1619-40, lies on the canal to the east of Christiansborg Palace. The long gabled façade and small dormer windows give a picturesque touch to the otherwise unimposing pile, but a grotesque note is struck in the 165 foot tower, whose lofty spire consists of the entwined tails of four dragons with heads pointing north, south, east and west.



HARBOUR OF AJACCIO, CAPITAL OF CORSICA BY A DECREE OF ITS MOST FAMOUS CITIZEN

Corsica has had several capitals in its day, according as Pisans, Genoese, French or the Corsicans themselves dominated the island. Ajaccio was made the capital in 1811 by Napoleon, though founded by the Genoese 300 years earlier. It is a quiet place on a wide indentation of the western coast, and does little but cater for visitors in the winter, although there is a certain export of wine and oil, sardines and chestnuts. Here we are looking out, from the hillside behind the long, straight Cours Napoléon, over the town in the foreground and the wide panorama of the gulf, the citadel is on the right at the base of the breakwater.



GULFS AND HEADLANDS OF ROCKY CORSICA

The characteristic growth is a kind of thicket called the "maquis," made up of arbutus, myrtle, cistus and great flowering heaths. It clothes the island from base almost to summit, and in the spring, when the various shrubs burst into bloom, the hill-sides are a mass of flowers. Under the hot sun a peculiar odour is exhaled which is so powerful that when the winds are off shore it can be detected far out at sea.

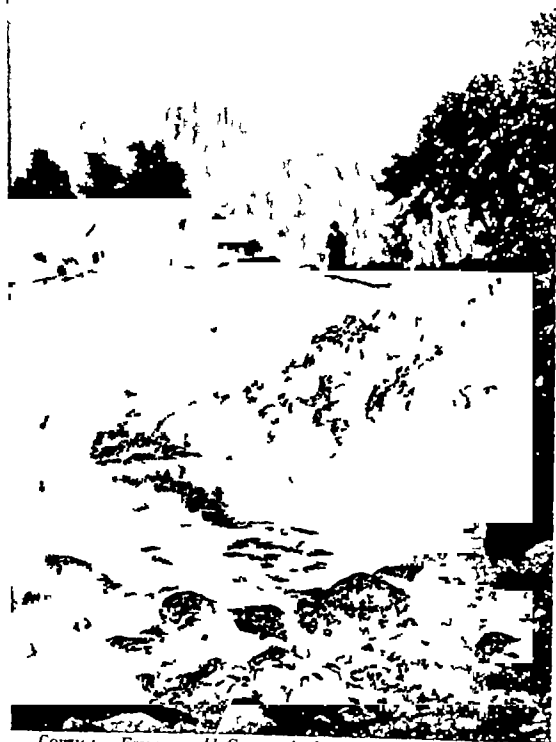
Where the rainfall is heavy enough there are forests of larger trees, including chestnut and beech, cork-oak and pine, fir, cedar and cypress. The name of the island means "land of the woods," and points to a time when Corsica was more densely forested than it is at present. Much of the ancient woodland has disappeared under the influences of fire, the woodman's axe and the omnivorous goat.

middle of June, when the landscape offers an entrancing sun-lit picture of flowers, green slopes and dark woods backed by the still snow-coated summits.

The climate being typically Mediterranean, it follows that the vegetation is also typical of this region, that is, it consists of plants which have the power of resisting drought during the warm part of the year. These plants may have thick fleshy leaves to diminish loss of water by evaporation, or bulbous roots where reserve stores of moisture may be accumulated, or roots that penetrate deeply in search of underground supplies. The mild winter permits almost continuous growth, and both bushes and trees are evergreen.

The summer drought prevents any general distribution of grass-land or meadow, in place of grasses we have plants with underground bulbs and tubers such as the iris and the arum, which for a short season add another touch of loveliness to the countryside, but die down in summer, leaving areas almost bare of any kind of vegetation. Absence of grass means absence of cattle, with the consequent absence of butter as an article of diet. The place of butter is taken by olive oil, the place of the cow by sheep that can feed on very poor pastures and goats that can feed on almost anything.

Owing to the fact that coal is absent and other minerals are but little

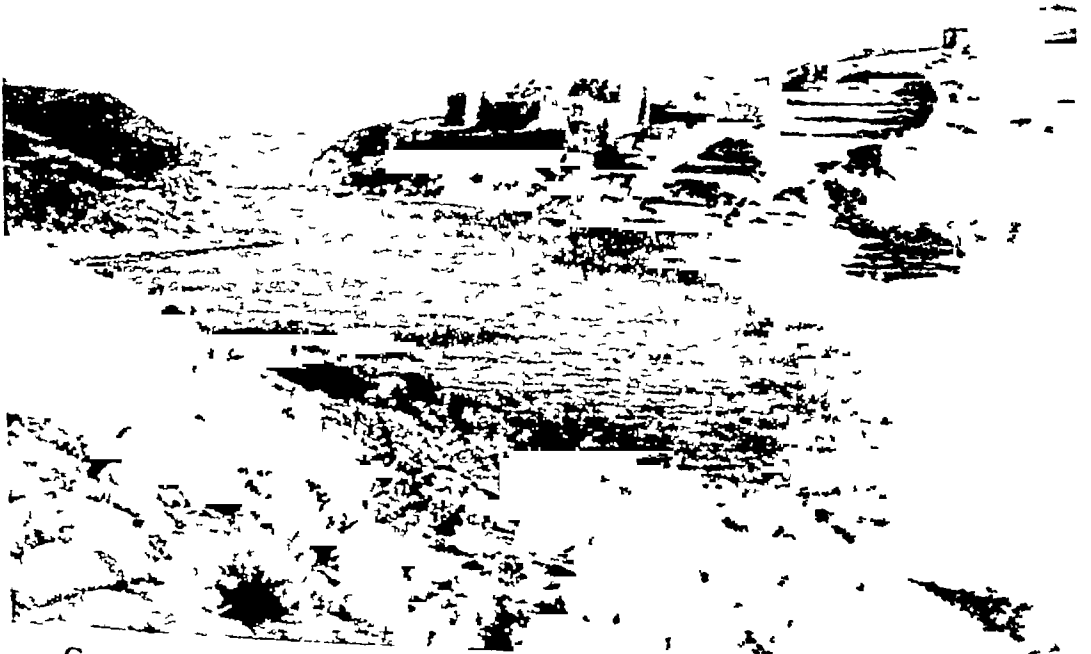


CORSICA From an old Genoese bridge over the Fium Orbo by Ghisoni there is a grand view of the river rocks of Kyrià Elléison

Photo except in pages 498 & 5 Havel, Emilia



It was descendants of Greek refugees from the Morea who founded, in 1774, the township of Cargèse with its two churches by the sea



CORSICA *Bomfacio, built by a Tuscan noble in the ninth century, stands on a scarped promontory guarding a narrow roadstead*



Nowhere is the mountain scenery of Corsica more rugged than in the Col de Bavella on the winding road from Zonza to the sea



CORSICA Corte nestling beneath its rocky citadel in view of Monte Rotondo was once the native capital of the island under Paoli



CORSICA *Glances in the old quarters of Corté, sloping down from the citadel to the river Tavignano, are altogether delightful*



CORSICA Climbing up the steep road from Bastia inland to the mountains this donkey and its rider pass beneath an old stone arch



CORSICA Not only its mountains, but splendid forests render Corsica one of the loveliest islands of the Mediterranean. Evia, inland from the Golfe de Porto, is on the borders of the chestnut forest of Aitone

Miss McCrumb



CORSICA. From the palm-shaded Place des Palmiers by the quays Ispicio Harbour little used for commerce but deep enough to berth the *Maurelania* stretches in a prospect of mountain ringed grandeur



CORSICA Above Ota, a beautiful mountain village not far from
L'Isola, towers the sharp-fanged peak known as Monte Signore
1500

exploited, the only occupations are those connected with the forest and with agriculture. The usual Malitainean cultivations are wheat, olives and the vine, and where these are most abundant varied in character the population is densest. Thus in the western district of Cape Cervo and the olive groves of the Balagne in the north-west there are numerous population centres and one small port, Calvi.

In the north-east is a famous chestnut country, a natural fortress with deep narrow valleys not easily accessible from the sea. Here the whole life of the community is based on the chestnut, the fruit is abundant in quantity and requires no cultivation. It provides flour for bread and for "polenta," a kind of porridge, and it enabled the people, as a whole, to resist the pressure of foreign invasion and the hardship to resist the pressure of the police. Other occupations connected with the forest are the manufacture of charcoal, of corks especially at Bonifacio and the preparation of the heavy red root of the "bruyère" for further transformation into "French" briars.

Transport by Mule and Motor

It will not be expected in a mountainous island thickly clad with wood and thicket having little to export and where isolation is the keynote of the life of the communes that either roads or railways will be abundant or excellent. There are however good well-engineered roads connecting the four ports, Ajaccio, Calvi, Bastia and Bonifacio and there is also railway communication between the first three of these. The common means of transport is the mule-drawn diligence though there are motor services between the principal centres.

Prominent among the native centres is Corte, the ancient capital in the centre of the island and in the very heart of the mountains. You may wander here for days amidst a circle of gorges, ravines and great granite hills and never meet a single human being. The houses

of the feudal capital are like above tier upon tier, the roof of a steep crag crowned with a fifteenth century citadel imposing and forbidding a path that was to which lies through crooked alleys, manure-heaps and piles of refuse.

Alien Port and Native Villages

The places that owe their origin to invaders who came by sea are naturally ports. The Romans had a settlement at Aléria (now a mere hamlet) on the east. Bonifacio was founded by a Tuscan duke who touched at the southern end of the island on his way from Africa and built a fort to be used as a defence against Saracen pirates. Calvi in the north-west, Bastia in the north-east, Ajaccio in the west were founded or like Bonifacio refounded by the Genoese. The principal port of the country is Bastia, the modern capital is Ajaccio.

Just as the typical Corsican village is a place of defence so the typical Corsican house is a kind of fort. It is very tall and hence was an admirable look-out station and it consists of a huge number of flats so that there was always a small army of defenders actually on the premises. In Bastia some of these buildings five or six storeys high house over five hundred people.

Many of the flats are built round a central courtyard which is the convenient receptacle for all the domestic refuse of the surrounding habitations. The earthenware drain pipes are external with an open mouth under each of the windows. When the occupier of the flat is in a hurry all that ought to go down the drain is thrown into the courtyard, the resultant odours, in certain conditions of the weather are probably without parallel elsewhere.

Ubiquitous Utility of Stone

Stone being plentiful and cheap this is the commonest building material and is used even in the construction of the floors. Everywhere are stone houses, stone barns, stone walls and stone baking ovens. These baking ovens are a feature of every village as



J. Morotti Bastia

CROWDED HOUSES CLUSTERING ROUND BASTIA'S OLD HARBOUR

Bastia, at one time the capital of Corsica, is still the largest and busiest town of the island, it has a population of over 29,000 as against the 19,000 of Ajaccio. This is a view of the old harbour, with the old town in the background. It has a number of manufactures, such as soap and leather ware, and fruit, oil, fish and tan extracts are exported.

they are placed along the roadside and are used by each of the families of the village in turn. They are heated by burning big bundles of shrubs cut on the neighbouring hillside.

The mountainous interior which afforded such admirable refuge also enforced the isolation produced by the sea. It brought about an attitude of suspicion to all visitors, who might be enemies in disguise, this in its turn bred a quarrelsome spirit in the people and gave the vendetta and the practice of brigandage a long tenure of existence.

that is still far from its close. And brigandage found in the natural conditions of the island much that was conducive to its operations.

At the same time the Corsican is patriotic and hospitable and less greedy for tips than some other people with pleasanter manners. There is no theft, stealing being regarded as too mean a vice to be practised by so proud and fiery a race. The Corsicans are too independent to make good servants, too lazy to make good workmen and too quarrelsome to be relied on for friendship.

CORSICA GEOGRAPHICAL SUMMARY

Natural Division Mountainous island, a remnant of the ancient Tyrrhenian Land. Its scarped coasts are due to the foundering of large crustal blocks which have sunk to form the basins of the Western Mediterranean and the Tyrrhenian Sea. (See Mediterranean Sea.)

Climate and Vegetation Winter rains and summer drought, maquis vegetation, heaths and evergreen trees, coastal swamps breeding ponds for malarial mosquitoes typically Mediterranean.

Products Wheat, olives, wine, the destructive goat, chestnuts principally for local food supplies.

Communications Railway, roads for motors or mule-drawn diligences.

Outlook An island off the beaten track, rendered more isolated by the tangled valleys and ridges of the interior, Corsica has bred an independent conservative people akin to the Albanians and as little likely to produce rapid changes in their world position.

Rocky Outpost of Southern Europe

by H. R. Hall, D.Litt.

Keeper of Egyptian and Assyrian Antiquities, British Museum. Author of "Aegean Archaeology," etc.

THE Island of Crete has of recent years acquired a notoriety which none could have predicted for it half a century ago. It was then considered merely a more than usually inaccessible island of the Mediterranean inhabited by Engad and Turks of more than usually bloodthirsty habits and visited only by an occasional officer on long leave in search of new brads to add to his trophies of the chase or an occasional don who took the summer term "off" to wander in an untouched Greek land and collect ancient coins.

It was indeed this last pursuit that brought Sir Arthur Evans, then keeper of the Ashmolean Museum at Oxford, to Crete for the first time and laid the foundation of his interest in and knowledge of the island that led him to his great discoveries at Knossos or Cnossus which have so to speak, made the reputation of Crete as one of the most interesting lands of ancient civilization. His work has shown that this island was the chief focus of the culture of the eastern Mediterranean in the Bronze Age which was the ancestor of the later Hellenic or Greek civilization of classical days and so of our own. Everybody who has travelled in Greece since about 1904 has also been to see Knossos and the ancient sites, Phaistos (or Phaestus) and Haghia Triadha, discovered by the Italians in the south of the island, and has made first hand acquaintance with its antiquities in the Museum of Candia.

Bridge Between Greece and Egypt

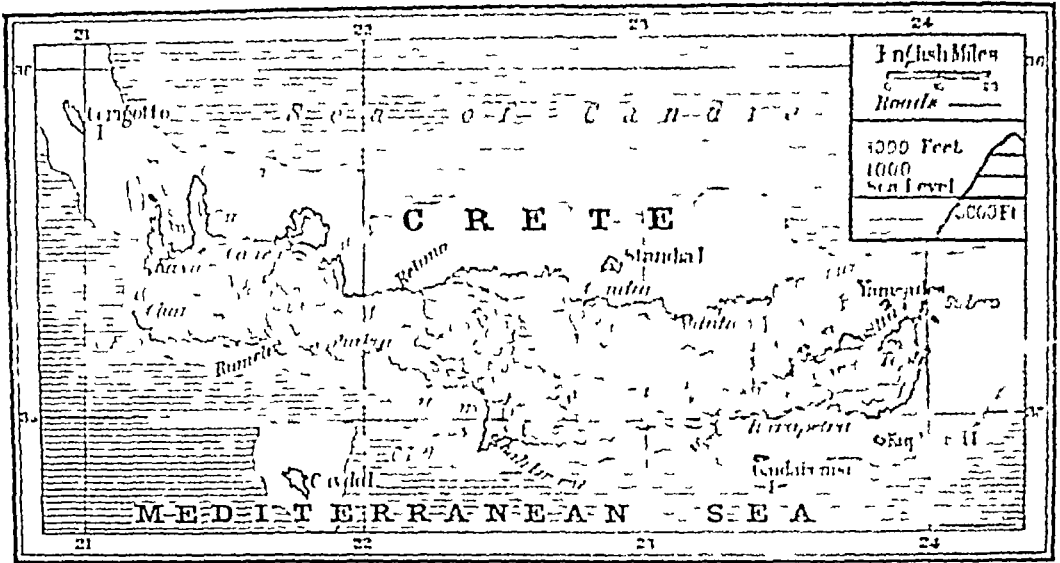
The reason for Crete's very ancient importance in the history of the world is to be found in her geographical position. The island lies like a bridge

between Greece and Anatolia able to influence and receive influences from both. She is and has always been Greek because the Aegean has always been Greek, and she lies as a sort of natural breakwater between the Greek sea and the main Mediterranean. At the same time she is with the exception of Sicily the nearest of European land to Africa as well as to Asia and above all the nearest to Egypt that ancient centre of human progressive activity. The effect of her proximity is evident in the archaeological evidence we have of her early culture-development partly originating from and always in close connexion with Egypt.

Ancient Haunt of Pirates

Also she is and always was a less sterile and more fertile country than continental Greece and Cretan civilization could grow up less trammelled by geographical conditions besides being protected by the sea from continental invasions. Crete possessed size and elbow room in which to develop which the smaller islands of the Aegean did not possess. Yet in classical days she lost her old preeminence to Greece proper and played but an undistinguished part in history being notorious for little else than her particularly pestilential breed of pirates, the Cretan corsairs who gave such trouble to the Romans.

Later she was conquered by the Arabs, lost by them to the Byzantines, then seized by the Frank Crusaders and handed over by them to Venice to be held for centuries as one of the subject lands of S. Mark. Next the Turks took her and she was thus once more placed under Moslem rulers, who governed her



LONG KNIFE-EDGE OF CRETE WITH ITS FOUR HEIGHTS

in their traditional way, chastising her with fire and sword when she rebelled, until final deliverance came in 1914 by means of her union with the kingdom of Greece.

Crete is the third largest island in the Mediterranean, and measures 160 miles long, while its breadth at its narrowest is only seven miles and a half and at its widest 35 miles. From the summit of Mount Ida, or Psiloritis, its highest point (8,065 feet), one looks down to right and left on the surrounding sea. Across the isthmus of Hierapetra, the narrowest part, one can ride across the island from shore to shore in an hour or two.

The eastern butt-end of the island, separated by this isthmus from the rest, is almost an island itself. The contrast between this isthmus and the towering height of Ida is striking, and when we see that besides Ida in the centre Crete has at its western end the almost equally lofty White or Sphakia Mountains (7,882 feet), between Ida and the isthmus to the west the Lasithi group (7,165 feet), and immediately overlooking the isthmus the heights of Kavusi (4,850 feet), we realize what an extraordinary lofty island Crete is for its breadth. It is like a jagged knife-blade emerging from the sea, and this is the view of its southern coast which

travellers to Egypt and the East so often see and either admire or turn from with a shiver. For it is a forbidding coast which to the passer-by gives no hint of the beauties and amenities that its dark silhouette conceals.

Indeed, Crete is one of the most beautiful and pleasant lands of the earth. It combines the sterner and somewhat rarefied beauty of continental Greece with the more opulent charms of Italy. It is very like Italy, with a difference that is obviously Greek. It is more fertile than Greece, and there are more trees, in spite of the secular ravages of that foe of all trees, the goat. The vine-terraced hill slopes and the wide-spreading olive groves remind us so of Italy that one is surprised not to see a campanile-topped village at the summit of every hill within view. The arid, light grey, trigonal peaks of Greece are replaced by darker mountains often of more rounded forms.

The Venetians cannot have felt themselves very far from home. Yet the people never became Italianised. Their Eastern Orthodox religion, doggedly maintained and little interfered with by the Venetians—who themselves were the most Gallic-like of Italians, and recked little of pope or cardinal—kept them true to their Greek nationality.

they were and are the most Greek of the Greeks. Even their Moslem fellow Cretan (now expelled) were a Greek, as they ex-Christians who had fallen away under the Turkish pressure.

There is in Crete some of the most beautiful and at the same time the grandest and most awe-inspiring mountain scenery of its kind to be seen in Europe. There are snows which rarely disappear entirely even in summer on Ida and the White Mountain even at this the southernmost latitude in Europe. The snows look finer on the White Mountain (which thus get their name) than on Ida for the western range is more peaked and wild than the central. It is a long long back of even outline massive it is true but disappointing as a mountain in spite of its height. The mass of Lassithi is more varied and interesting.

But nothing equals the wonderful gorges of Crete that of Sfakia the famous gorge of Rumi on the southern side of the White Mountains rivals anything in the Himalaya or in China men say. And this though the finest

is not the only one of its kind. Then there are great chasms in the rock like those of Kavali and Arvi where in old days godhead was deemed to dwell indeed, and the famous caves like those of Ida and Dikte (the latter in Lassithi) equally deemed homes of deity.

Everywhere close to these mighty hill and awesome gorges is the bright blue sea of Greece with its dolphins and white horses in the windy spring or the sudden and fierce black storms of winter. The Mediterranean is no restful sea and the Aegean with its cross-currents deflected in all direction by mountains is the home of Aeolus. In spring when Boreas flows the small harbours of the north coast are often inaccessible and many a visitor from Athens has to return thither unable to land at Candia. But for an occasional sandy beach it is an iron bound coast.

But when one has landed it is in spring at any rate the loveliest of island everywhere covered with flowers. The anemone the crocus the hyacinth the iris the saffron the lily the poppy are here in their native land they



EXCAVATED REMAINS OF THE WONDROUS PALACE OF MINOS

Knossos, the city palace of King Minos, who is famed for the legendary monster haunted maze he kept here, few miles to the south of Candia. The vast building is roughly rectangular and its sides measure about 150 yards. Staircases connected the various storeys and there are elaborate drainage systems in this marvel of 3,600 years ago, which housed a stupendous retinue.



R R Hill

CAVALCADE UPON THE STONY STEEPS THAT LEAD TO IDA'S SNOW-STREAKED RIDGE

Mount Ida, or Psiloriti, is a mountain mass whose highest peak rises over 8,000 feet above sea level and forms the juncture of the two full stems of Crete from the east and west respectively. The combined hill chains measure about 160 miles in length, making the country extremely wild though by no means entirely barren. In the west there is a fertile strip around Ganez, east of Idyllia Candia, in a depression east of which again the mountain spine rises till it reaches the narrow but rich lowland round Hierapetra. Most of the population and cultivation centres round these three tips in the heart of mountain wall.



H. R. Hall

RUINS AT GORTYN, ANCIENT RIVAL TO KNOSSOS FOR SUPREMACY IN CRETE

At the base of the southern slopes of Mount Ida stand the ruins of Gortyn, once the rival to Knossos in the struggle for supremacy among the city states of the Minoan civilization. The city has left sufficient ruins of its lower town to show that this had a circuit of over five miles upon the left bank of the river Lethraos. An encircling wall was begun but never finished, and there remain vestiges of a bath, a theatre upon the acropolis and an aqueduct though these are all of later construction. Among the oldest buildings is one converted by the Romans into a theatre and also the temple of Apollo Pythios.

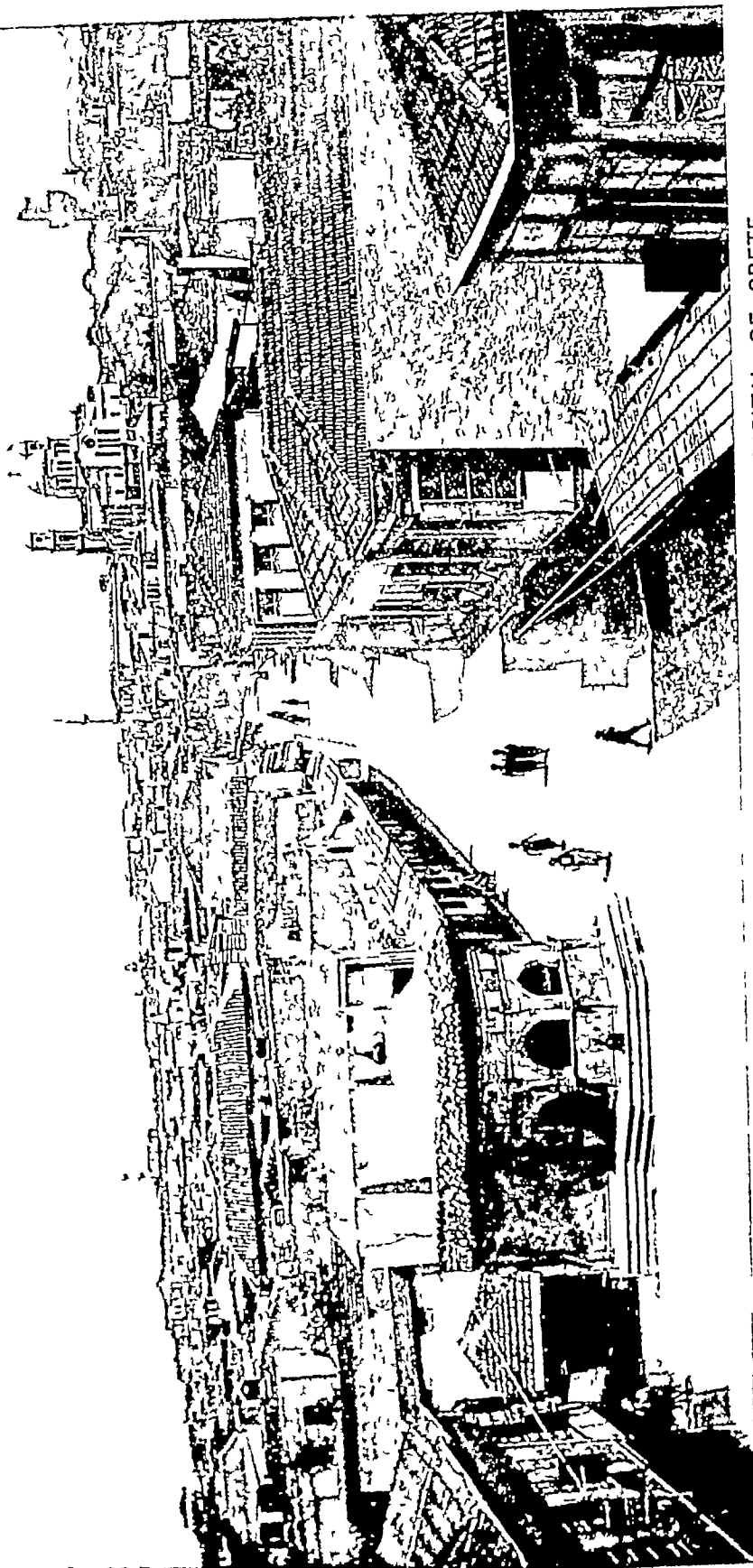


ONE OF THE AWE-INSPIRING RAVINES OF THE CRETAN HILLS

White Mountains of Nida in Ida and of Lassithi. Their height above the sea ranges from 3000 to 6000 feet. They are nearly circular a mile or two across with an absolutely flat surface around in each case by a wall of mountain. The lowest that of Lassithi is cultivated, the others are wild the homes of the mountain summer shepherds. They look like extinct craters, but there is no volcanic action visible in Crete which is almost all limestone. They are water made—once the basins of upland lakes, now drained either naturally or artificially. Lassithi probably the latter. In old Minoan days,

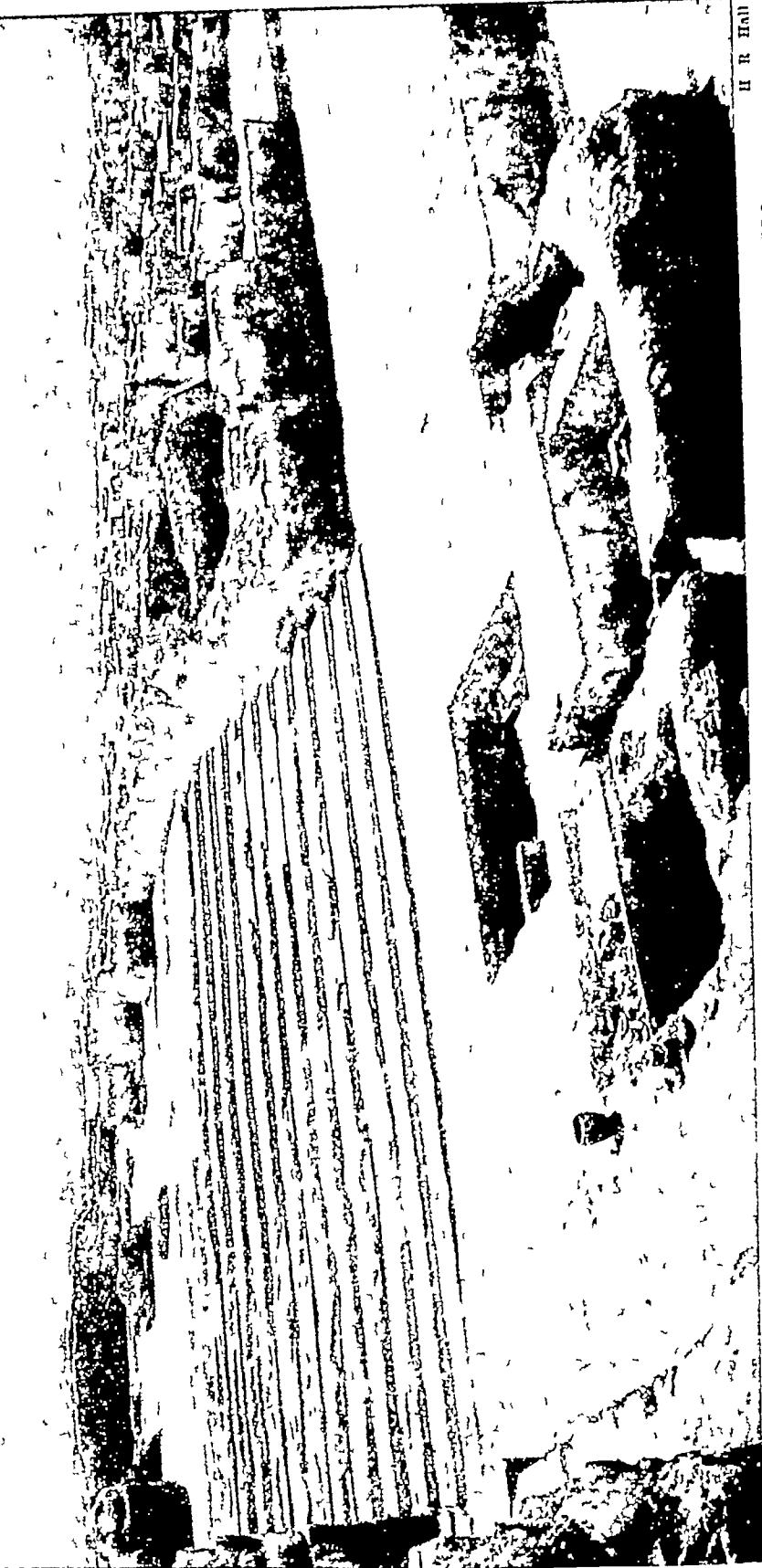
On to the Nida plain, the highest of its yawning the mouth of the great cave in which legend said Zeus was born, and he was suckled by the goat Amaltheia both there and in the other cave which similarly looks out from the Diktæan hillside on to the wide snow-pine plain of Lassithi.

The mountains are grouped in more or less isolated masses, the rugged snow-capped White Mountains connected with hog-backed Ida by lower ridges such as Kentros broken by the valley of Amari, then the wide plain of the Messara with the lower range of Kopidinos to the south cutting it off



OVERLOOKING CANDIA, FOUNDED BY THE SARACENS AND ONCE THE CAPITAL OF CRETE

It was during the Venetian It was during the Venetian First founded about the year 824, Candia was taken from the Saracens by the Genoese in the twelfth century and fortified by them. occupation which came somewhat later, that Candia reached its prime These enterprising people supreme as merchant adventurers, built the walls, an arsenal and a cathedral this last survives, till the nineteenth century when it was replaced by a structure raised by the Greeks There is a small harbour from which ships take the grapes oil almonds and wine of the neighbourhood



H. R. Hall

ALL THAT REMAINS OF THE GREAT DANCING HALL AT THE CITY PALACE OF PHAISTOS

As old as Knossos, the city palace of Phaistos lies on the road from the former town to the sea. Phaistos is built about a ridge whose three summits formed the Acropolis and, as in the sister city, there is preserved what has been called a "theatral area." This was the prototype of the theatre developed by the Greeks a thousand years after, and consists of two flights of steps—one of which is seen above—at right angles to each other. The other flight is just out of the bottom of the photograph, and leads down from left to right. To the right again is the dancing floor



VENETIAN FOUNTAIN IN THE MAIN SQUARE OF CANDIA

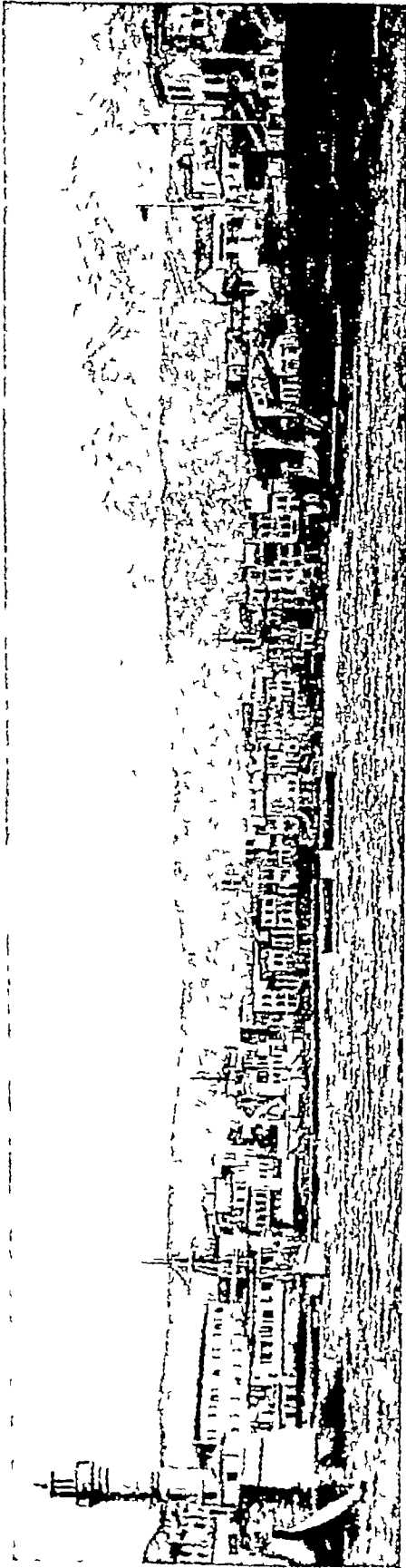
On the way to the Venetian Fountain, we saw the remains of the old Venetian Arsenal, which was built by the Venetians in the 17th century. It was a large building, which was used for the storage of arms and ammunition. It was destroyed by the Turks in 1669. The Venetians had built the Arsenal in the 17th century, and it was one of the largest and most important buildings in Candia. It was a symbol of the Venetian power and influence in the island. The Venetians had built the Arsenal in the 17th century, and it was one of the largest and most important buildings in Candia. It was a symbol of the Venetian power and influence in the island.

from the sea and with its solitary conical hill of Iuktas in the north or looking know-on then peaked Laithi the ancient Dikte then the isthmus of Hierapetra then the fill of Kavusi which remind the Englishman irresistibly of the series of Watwater of Kirk Fell and the Great Gable.

The western end of the island was too generally rugged for the development of civilized life at the beginning, of history. It remains in many ways the wildest part of the island. The central fertile plain of the Messara was the scene of the development of the Cretan Bronze Age culture. Here the first

inhabitants coming from Anatolia in the east and Africa in the south already in the later Neolithic Age had the foundation of the great civilization of the Minoan the contemporary and rival of that of the Pharaohs.

Both tradition and archaeological discovery proclaim Knossos as the chief and ruling centre of the ancient polity. Here was the great palace of the Knossian King Minos the thalassocrat and lawgiver who typifies in Greek legend the sea ruling and law-enforcing power of prehistoric Knossos. This palace was the legendary Labyrinth the abode of that fearsome monster the



CANEA PORT, CRETE'S CAPITAL AND THE FINEST HARBOUR IN THE ROCKBOUND ISLAND H. B. HALL
Canea is built on the site of the old city of Cydonia, and towards the western end of the north coast. It abounds in mosques, though the Mahomedan population has dwindled considerably, and among the souvenirs left by the Venetians are the encircling walls, the fosse that defended them and a few architectural fragments

Minotaur—a myth whose origin we know from the discoveries of Sir Arthur Evans. Here bulls were venerated as symbols of the god, and young men and maidens were sent to make sport with bulls in the arena in the dangerous game of "bull-leaping," when the performer turned a back-somersault through the horns and over the back of the charging bull. So we see from the Knossian frescoes and other representations of 1500 B.C. or thereabouts.

To the south Knossos was connected by a road, traced by Sir Arthur Evans, with the southern sea. It is represented to-day by the route from Knossos to the equally ancient palace of Phaistos excavated by the Italians and the rather later one at Haghia Triadha, both near Dibaki, where the Messara plain meets the sea in a wide-curving bay facing east.

The isthmus of Hierapetra also was a very ancient centre of civilization, and the whole island east of Ida has yielded inestimable treasures of archaeological knowledge which are the more interesting because they are the oldest relics of European civilization, and because they are so amazingly illustrative and confirmatory of the enthralling Greek legends of the days of the heroes, familiar to us from our childhood.

The personal appearance of the ancient Cretans as shown on their monuments proves that the modern inhabitants are the direct descendants of the Minoans. The type is the same, and the old people always represented themselves with remarkably small waists, especially in the case of the men—a characteristic which still persists among the Cretans, who have the smallest waists ever seen in the male kind, as has been noted by many travellers.

The ancient Cretan women seem to have been much more interesting than their modern sisters, who suffer from the combined effects of centuries of repression both in classical Greek times and under the Moslem dispensation. The ancient ladies were indeed ladies,

as we see from the frescoes. The ancient men wore nothing but a waist cloth kilt or drawers and the high boot of white leather which are till one of the most characteristic and peculiar things in the land they are necessary in this rocky and thorny country.

The numbers of the population of ancient Crete we do not know. We can read the numeral of their hieroglyphic system it is true but nothing else and we must wait till the day of decipherment of the clay tablet records from Knossos before we can express any opinion on the point. The modern population has varied at different times, owing to massacres and emigrations but now may be estimated at about 350,000. Of these very few are Moslems most of the last lingering Islamites having departed at the end of the Great War. Only a few remain at Candia, formerly their chief seat.

The Cretan towns resemble those of the other Greek lands. The picturesque and interesting Gothic element due to the Franks, which we see in the Morea in the castle of the Larissa at Argos or in Cyprus in the lovely abbey ruins of Bellapais, St Hilarion and Belveder is absent. There were no picturesque French knights and "trouvères" in Crete, but hard headed Venetian "provveditori" and "podestà." A crocketed ogival door way or two there may be—that is all.

There was a quaint Renaissance stone building (a magazine) near the museum



IN A SIDE STREET OF OLD CANDIA

Many styles of building add to the fascination of wandering through the old town once known as Megala trias, now called by the Cretans Iraklion. These beily, shuttered windows remind one of the women's quarters in the days of Turkish rule.

at Candia which has now unfortunately gone the way of everything Frankish which can be pulled down cheaply. a narrow national fanaticism is the bane of the Greeks as of the Italians and other peoples. It is to be hoped that the splendid Venetian fountain in the market place of Candia will be preserved from the patriotic vandals. The Turkish buildings will certainly go.

Luckily, with the exception of a fountain or two there is nothing Moslem

that need excite much compassion if it goes. Of the Candia mosques one is quite modern while the other is a converted Venetian-Gothic church, so altered and hacked about as to be of little interest though no doubt it ought to be preserved if it is abandoned by the Moslems. Even the great ramparts of Candia that saw the siege of 1669 are threatened. They are splendid examples of Venetian fortification, with interesting gates, and will be remembered well by anyone who served with the British garrison which held Candia for the Powers from 1898 till 1908.

Besides Candia, which represents the ancient Knossos, the other chief towns are Canea, the nominal capital, which is nearer to Italy and "civilization," Retimo between Canea and Candia, Sitia at the eastern end of the island and Hierapetra on the south coast. The last is little better than a village, while Candia has about 25,000 inhabitants and Canea 20,000. Inland there are many big villages which act as commercial centres.

There are schools and churches everywhere, as everywhere in Greece there are schools and churches. Unhappily, both are, when modern, of the most appalling kind of cheap "meeting-house" architecture that can be imagined. Both priests and people are sternly practical in these matters.

The monks, with few exceptions, are even less cultured than the priests, but then, after all, they are more farmers than clerics, and very good farmers, too. Among the monasteries of the island are Arkádi, a historic house that saw

one of the greatest tragedies of the insurrectionary war of 1866, Toplu or Topler, "the Guns," at the north-east end of the island, Asomáton or Amári ("Amari of the Angels") between Ida and Kentros, Panagia Krystallina ("Our Lady of the Snows") in Lasithi, a house of call renowned for the fine quality of its raki, Arvi, a strange, primitive little community whose house overlooks the Libyan Sea, and many another throughout the island.

As in the West in the Middle Ages, the monasteries are also inns, though the muleteers do not always love them, this depends on the quality of the wine or raki supplied. Roads were until lately literally non-existent, nothing but bridle-paths being used on which one rode one's pony or mule, with muleteer and sumpter-mule in attendance, covering at most about 30 miles a day. There were traces of old Venetian and Turkish roads here and there, made of stones, degenerate descendants of the old Roman roads, but they were sedulously to be avoided by all who valued their seat upon their mounts. In fact, travel in Crete until about 1914 was exactly what it was in the Europe of the twelfth century.

Now, unhappily, ugly motor roads are being made, and a railway may even follow, though one sees nowhere much where it could go, except in the Messara, without being prohibitively expensive to build. Even Crete will soon have lost her unique charm. So that one can recommend those in search of the picturesque to repair to Candia while there is yet time.

CRETE GEOGRAPHICAL SUMMARY

Natural Division Mountainous island, with a main east-west axis along the line of mountains, from the backbone of Greece through Cyprus and the Taurus Mountains to the east end of the Caucasus Mountains. The south coast is a scarp facing the foundered basin of the Eastern Mediterranean Sea. (See Mediterranean Sea, Corsica.) The plain of Messara suggests similarities with Andalusia.

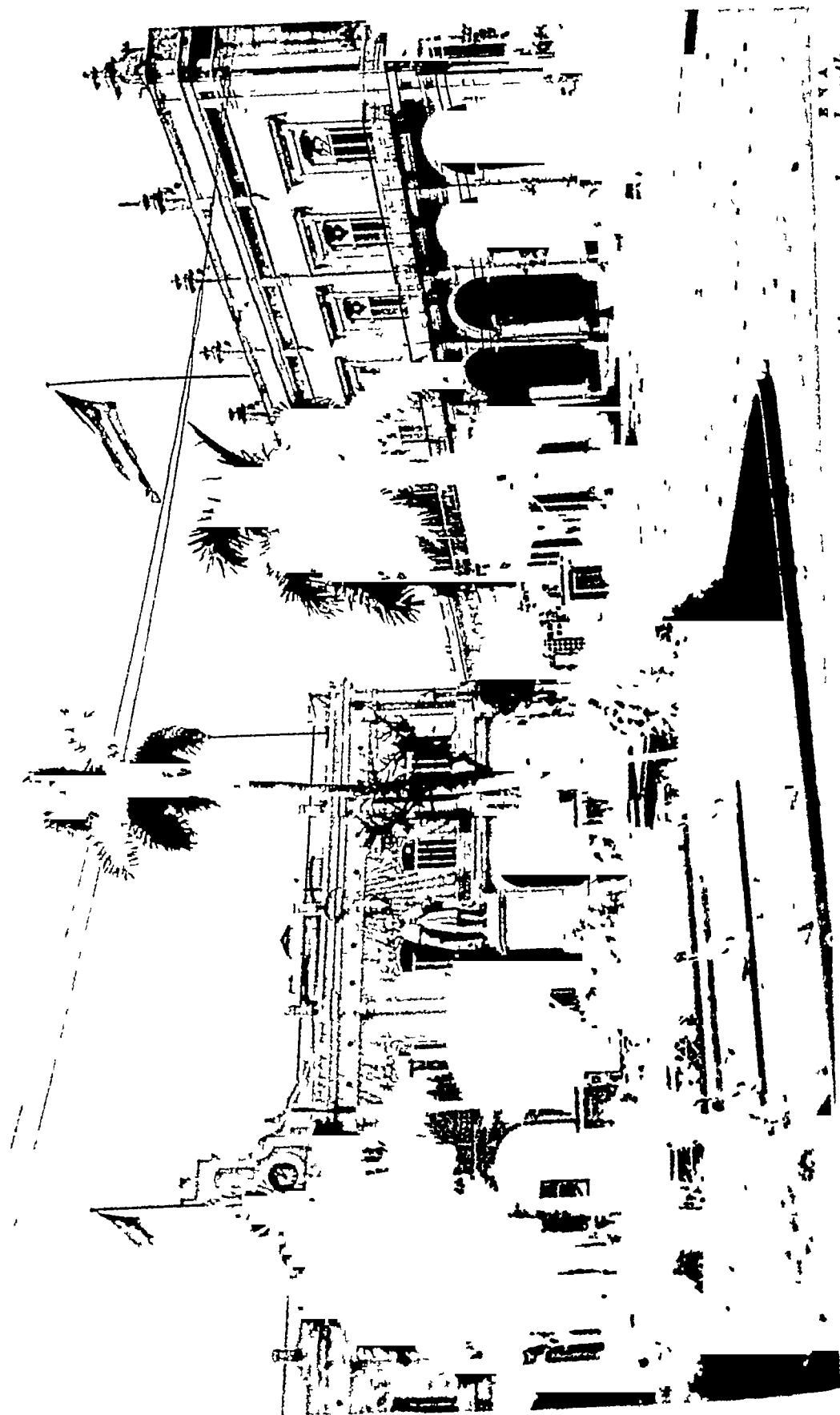
Climate, Vegetation, Products Typically Mediterranean. Winter rains. Maquis,

olives, wine, destructive goats. Abundant water supplies give to the island an Italian fertility in a setting that is predominantly Greek.

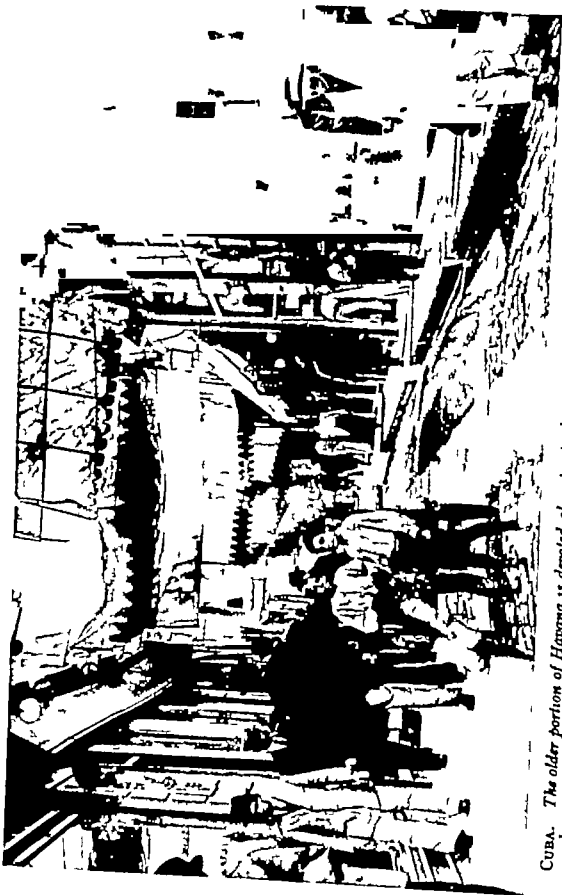
Outlook A "stepping stone" between Greece and Anatolia, a self-sufficient island, now as always capable of sustaining a considerable population. An island with a great past, Crete will contribute greatly to the progress of the Eastern Mediterranean, as the conservatism engendered by the Turk is discarded.



CUBA *Of Havana's many churches the best known is the cathedral where the remains of Columbus rested for nearly 400 years*



HAVANA. The old Governor's Palace and Senate Building off the Plaza de Armas, a public square adorned with
statues of Ferdinand VII are two of the varied government buildings scattered throughout the city of Havana



CUBA. The older portion of Havana is devoted almost entirely to commercial pursuits and this street sun shaded and so narrow as to permit of little or no traffic is O'Reilly Street principal business thoroughfare of the city



CUBA Facing the city of Havana lying on a similar peninsula, Morro Castle with its wireless station guards the gateway to the fine land-locked harbour



The maximum breadth of the harbour is a mile and a half its length three miles its entrance part of which is seen above is only 1,000 feet broad

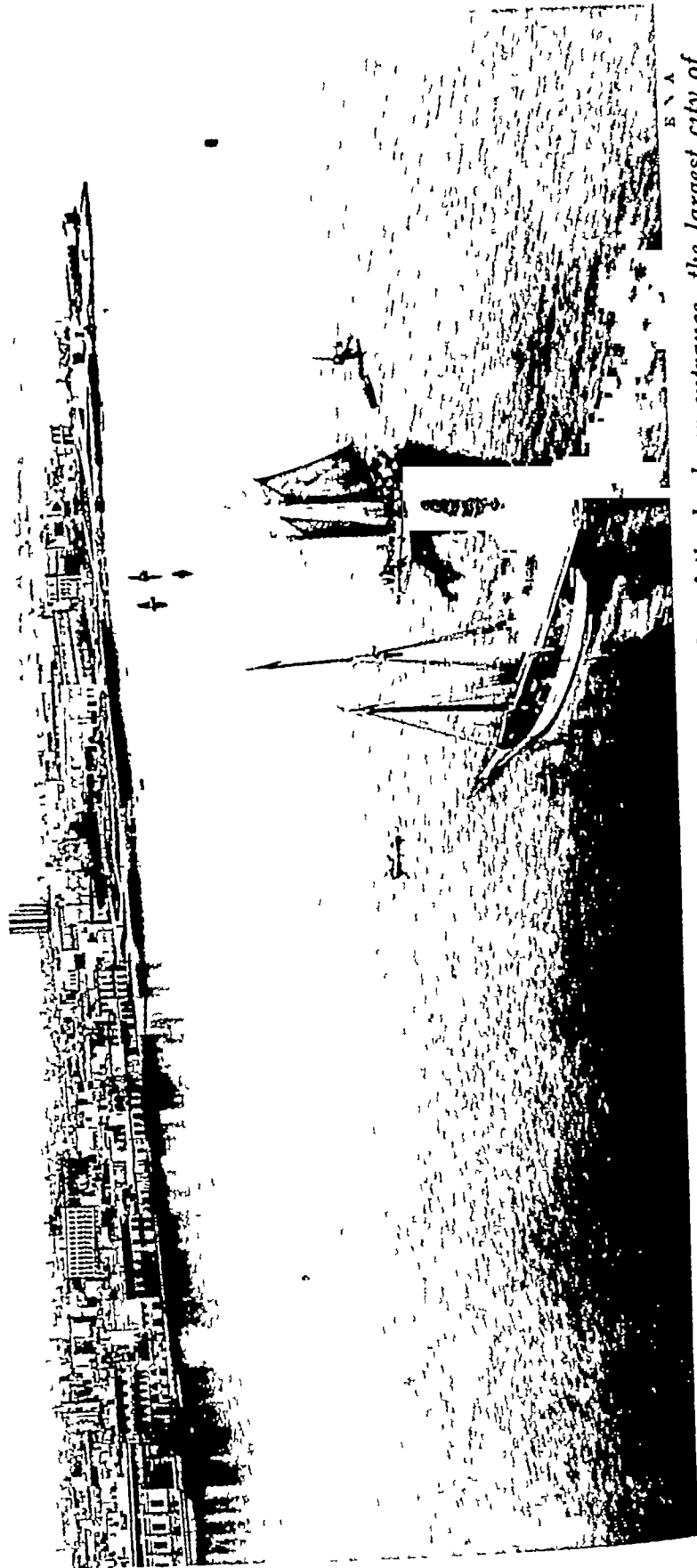


Underwood

CUBA *In this rich tropical island colour caste hardly exists, and racial mixtures are betrayed by dark and light complexion*



CUBA Monserrat Church outside Matanzas city is said to effect the same marvellous cures as the ancient Monserrat Monastery in Spain



E A

CUBA From Cabañas fort, adjacent to the Morro on the eastern edge of the harbour entrance, the largest city of the West Indies lies exposed to view—Havana, a spacious capital of noble and impressive appearance

CUBA

Most Fertile Island of the Caribbean

by Robert Michras

World Traveller and Writer on Foreign Affairs

CUBA will always be associated with the romance of the discovery of America. Coming on from the Bahamas Columbus landed on this island in 1492 and declared it was the most beautiful country ever beheld by mortal eyes. His praise was no doubt somewhat extravagant but allowance must be made for his circumstances at the time. There is much that is beautiful and attractive about Cuba but the fame of Cuba rests on other grounds. Before the Great War Cuba was known as the land which produced the finest cigars in the world. Since then its sugar and its control of the sugar market have been much more in evidence because of the hard and difficult economic situation that has ensued.

At the end of last century Cuba was bulking largely in our newspapers because of its long and desperate struggle for independence. That struggle came to an end owing to the interposition of the United States who as a result of the Spanish American war of 1895-99 liberated the island.

Status of the "Queen of the Antilles"

Among Cuba's other claims to fame may be placed the fact that its political status has originated a new verb—to Cubanise. Although Cuba is an independent republic the United States takes something more than a benevolent interest in it. really it is a quasi protectorate of America and the word was invented to express this relation.

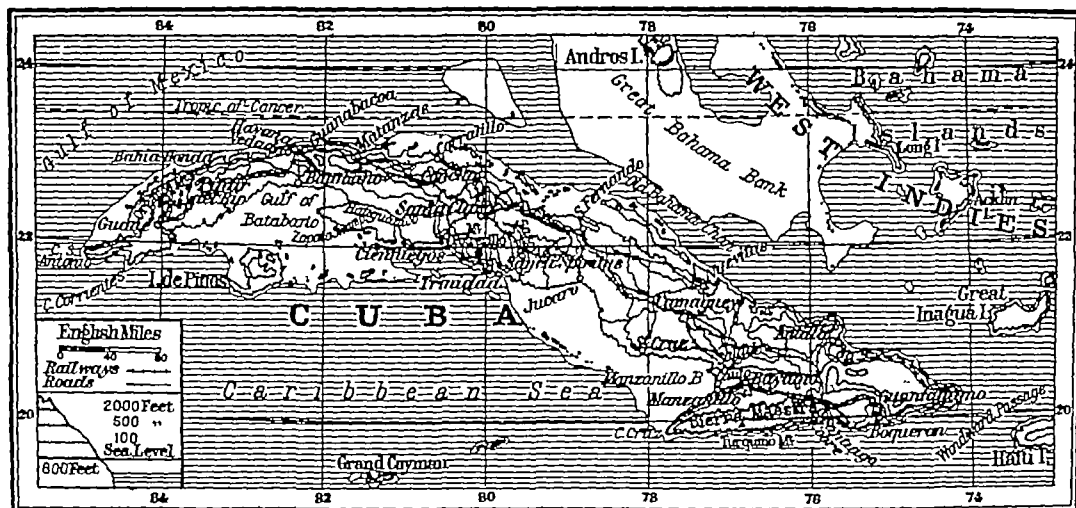
Such the largest island of the West Indies—which as a whole are the subject of a separate chapter—and often called the Queen of the Antilles, Cuba lies on rather than in the Caribbean Sea. Its western end juts out into the middle

of the entrance to the Gulf of Mexico 130 miles from Yucatan and about the same distance from the mainland of Florida, though the Florida Keys railway built on the keys or islet off the coast to Key West make the distance by sea about 95 miles.

Cuba: Extent of Island

Cuba is a long narrow island, the general shape of which rather suggests an enormous crocodile. From east to west it is 730 miles in length and its width varies from 2 to 160 miles. Including the Isle of Pines and the islands some of them in archipelagos and keys (or cays) with which it is surrounded and which belong to it Cuba has a total area of nearly 46,000 square miles the area of the main island being rather less than 4,000 square miles. The coast with a line upwards of 2,500 miles long is much indented and has several splendid harbours with narrow winding entrances but opening into broad, lake-like expanses as at Havana Santiago Guantánamo and Cienfuegos.

Mountain ranges which are an extension of those of Haiti and Porto Rico run lengthwise through Cuba, and may be regarded as the spine of the crocodile of the preceding paragraph. These ranges are high in the east in the Sierra Maestra with the Peak of Tarquina nearly 8,400 feet high and comparatively low in the west in the Organos Mountains which are nowhere much above 2,500 feet. Between these sierras is a limestone karst region—a rolling undulating country broken by hills here and there either singly or in small chains the highest point on the south being the



CUBA, LARGEST OF THE WEST INDIES, AND ITS RING OF ISLANDS

Potrillo Peak with a height of about 2,900 feet. The Sierra Maestra is composed of granite with an overlay of calcareous rock, and is heavily forested. Under the name of the Sierra de Cobre, part of this range, lying close to the sea west of Santiago, gives the coast in that quarter a bold and even romantically beautiful aspect. The Organos range consists of carboniferous strata, and from its southern slopes the famous Vuelta Abajo, near Pinar del Río, which produces the finest cigar-tobacco in the world stretches down to the Caribbean.

In a general way the province of Oriente, formerly called Santiago, corresponds to the eastern highlands, and the province of Pinar del Río to the western highlands, while the provinces of Santa Clara, Camaguey—also named Puerto Principe Matanzas—and Havana correspond to the central karst region. And here it may be mentioned that in the limestone there are many caverns, some with magnificent stalactites. Much of the coastal area of Cuba, especially in the south, is marshy.

The rivers of Cuba flow north and south of the mountain ranges and are numerous, but have mostly very short courses, which, however, serve to irrigate the plantations, though of little or no use for navigation. The principal river is the Cauto, 200 miles long, and, exceptionally, it has a westerly course, it empties into Manzanillo Bay, on the

south-east of the island, and is navigable for a stretch of several miles.

On the north of the island the shore is largely coralline, but on the south a good deal of it is just plain mud and sand, much subject to overflows from the sea, but also covered in many places with mangroves—the business of which is to convert, in process of time, swamps and marshes into solid ground, and they do by holding tenaciously with their roots, both above and below the water-line, all the soil they possibly can.

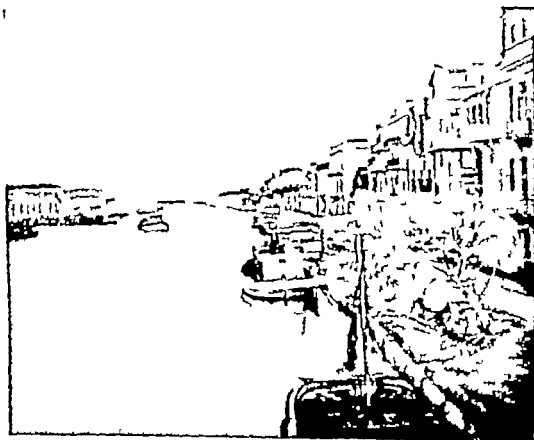
Speaking broadly, the soil of the island is alluvial and very fertile. Much of it has been under cultivation for sugar or tobacco for two or three hundred years. With its natural richness increased by fairly steady tropical heat and abundant humidity, its productiveness is extraordinary and has doubtless somewhat encouraged the Cuban, at least in past years, not to do all that could be done to make the utmost use of it. But to be strenuous in the tropics is not easy, and it is within them that Cuba, like most of the West Indies, lies. Its typical tropical climate is modified, however, to some extent by its insular position, and varies, of course, according to altitude in any given district—for example, frost is not unknown in the highlands. There is a great deal of rain, especially in the north-east, which gets the full benefit of the trades and where the annual rainfall is about

100 inches at Havana the annual average is not half that quantity.

There are virtually just two seasons in Cuba and they are distinguished by difference in temperature than by difference of rainfall. The dry season—it is not really so very dry—but from November to April May and is relatively cooler than the wet season which fills in the remainder of the year and has about twice the rainfall. The mean temperature of the dry or winter season is between 70 and 80 F. and that of the wet or summer season between 80 and 90 F.

Taking any average part of Cuba the oscillation of temperature is remarkably little. The mean temperature at Havana for instance is 77 F. and the variation is at most 12° up or down for the year. Santiago is rather hotter and some places in the north as well as

the south are imply muggy. The swampy districts as might be expected are malarial and the diseases peculiar to the tropics are not absent from Cuba. Yellow fever however has been stamped out. It has been proved abundantly that with proper attention to hygiene Cuba is a much a white man's land as a colored man's. It is no wonder that so many Americans and Canadians pass much of their time on the island particularly during the winter for life is at then with the requisite care is delightful. To be sure there are hurricanes or tornadoes of great violence at intervals of years and some of the historic ones wrought disaster—in 1854 Havana suffered the loss of nearly 200 buildings and 5000 lives but these hurricanes occur only at the end of the wet season and are not usually so terribly destructive.



NEAR THE MOUTH OF THE SAN JUAN RIVER IN MATANZAS CITY

At the head of Matanzas Bay on the north coast of Cuba, lies the city of Matanzas, capital of the province of the same name and second seaport of the island. Founded in 1693, the city consists of three portions, separated by the San Juan and Yumuri rivers which empty into the beautiful and well sheltered bay. At its mouth the San Juan is about 100 feet wide.



Realistic Travels

MATANZAS PROVINCE

LUXURIANT TROPICAL VEGETATION IN THE FERTILE VALLEY OF THE YUMURI, MATANZAS PROVINCE

Although like other islands of the Greater Antilles group Cuba is mountainous, much of the soil is rich and fertile, and the vast forests clothing the hilly districts contain many valuable cabinet woods, besides dye woods, fibres, gums and resins. From the agricultural point of view, Matanzas is one of the most fertile and most thoroughly developed provinces, and the beautiful and extensive valley, watered by the Yumuri river and stretching behind Matanzas city, is considered one of the finest natural parks in the world, its rich and varied vegetation making it a worthy Mecca of the botanist and art student.



TOBACCO CULTIVATION IN HAVANA WORKERS IN A VEGA

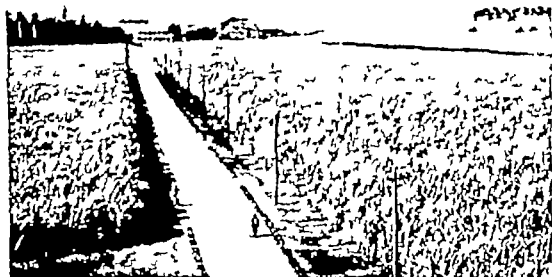
The western part of Cuba is given up almost entirely to the cultivation of tobacco and the numerous plantations consist of small fields or "vegas," comprising several acres, selected wherever the land is richest. The superior qualities of Cuban tobacco are grown principally in the Vuelta Abajo, a district covering all of the province of Pinar del Rio and the western portion of the province of Havana.





INSPECTING THE CURED LEAF IN A TOBACCO WAREHOUSE

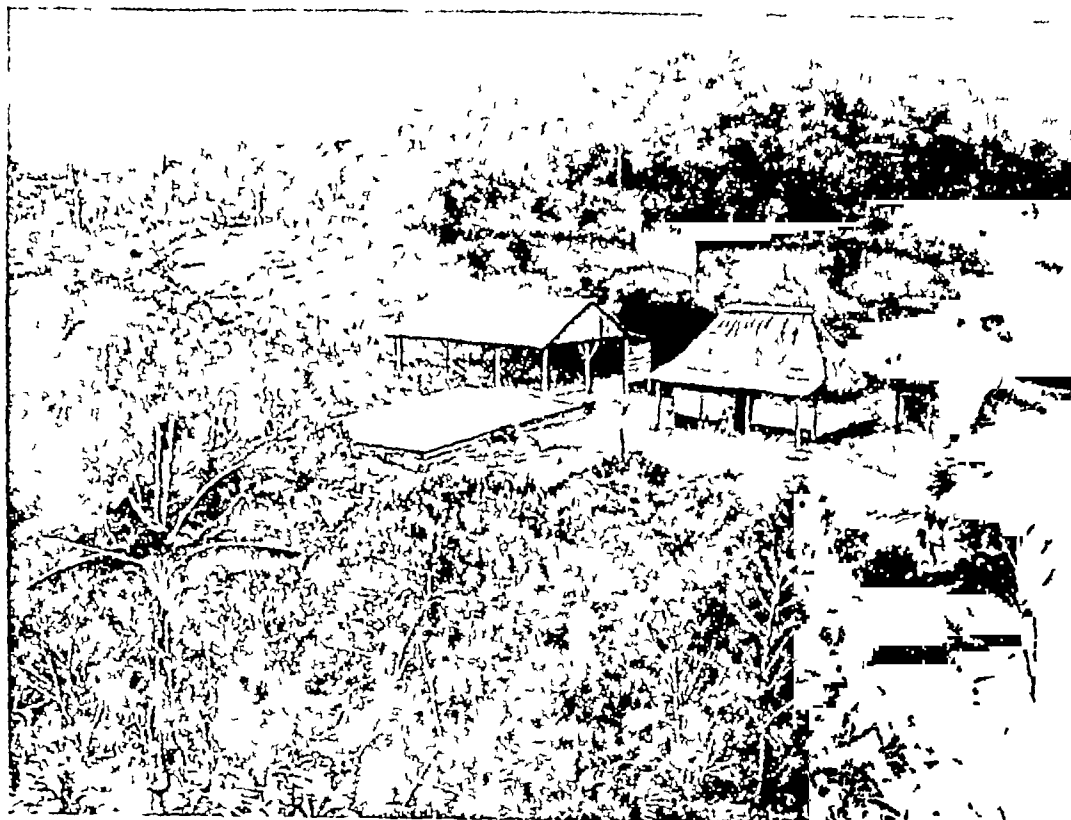
At the end of the year, the tobacco industry in Cuba was valued at \$100,000,000. The industry is the second largest in the country, after sugar. The tobacco industry is the second largest in the country, after sugar. The tobacco industry is the second largest in the country, after sugar.



OVERLOOKING THE SUGAR-CANE FIELDS OF CUBA

REUTERS TRAVEL

The production of raw sugar in Cuba expanded rapidly within the last hundred years, and is still the dominant crop of the island. Sugar is produced chiefly in the central part of Cuba, and it is estimated that the sugar plantations cover a total area of 1,400,000 acres. In 1925 there were nearly 200 sugar mills in operation, and the total crop in 1922-23 was 3,601,036 tons.



COFFEE-RAISING CENTRE IN THE PROVINCE OF ORIENTE

Realistic Travels

Coffee raising was for a long time almost exclusively an industry of Oriente, formerly Santiago, the most eastern province of Cuba. It received a great impetus from the immigration of French refugees from Santo Domingo in the late eighteenth century, but although Cuban coffee still has a world wide reputation for its excellence the vitality of the industry has gradually declined.

quantity. How gigantic this industry is further appears from the fact that it supports 200 sugar mills and 2,800 miles of private railways.

Next to sugar comes tobacco, the manufacture of which has a value of about ten millions sterling a year. Something like 135 million cigars and nine million boxes of cigarettes are exported annually. About three-fourths of the tobacco of Cuba comes from the province of Pinar del Rio, the remainder from Havana and Santa Clara provinces. Havana is the chief seat of the manufacture, and it is of interest to note that the work in the factories is lightened by the reading aloud of newspapers and by music by men appointed for the purpose. Coffee is not grown on the scale that once obtained, but rice is being increasingly cultivated. The export of fruits, such as pineapples, bananas, coconuts, oranges and lemons, is very large, and

promises to become more valuable even than tobacco. Cuba also produces immense quantities of rum and honey.

If to all this wealth is added that which is derived from minerals—copper, iron, oil, manganese and asphalt—it will be seen what an exceedingly rich island Cuba is. American capital is active in its development, especially of its mines and railways, though in the latter British interests, as represented by the United Railways of Havana, have the larger share. America has most of the exports and imports—about three-quarters of the total, which in 1920 was about £270,000,000 sterling.

The shipping is enormous and reaches out to all the world, and the island is well supplied with railways, their length, including both public and private lines, approximating 6,000 miles. Curiously enough, Cuba had a railroad as long ago as 1837—the first in any Spanish land. Railways connect all the chief towns

and ports. From Havana to Santiago is a run of twenty four hours. There are many miles of fairly good roads though seasonal influences have always to be taken into account.

Cuba has nearly 3,000,000 inhabitants of whom three-fourths are white, the remainder being black or of mixed blood. Only a third of the population lives in the cities and principal towns. Havana has 365,000 people, Camagüey and Cienfuegos 100,000, next is Santiago with 70,000 and Guantánamo, Santa Clara and Matanzas are not far behind. Besides several towns have populations ranging from 50,000 to 30,000. Life varies a little in these cities and towns but the predominant tone is Spanish.

In many ways Havana is the most interesting city of Cuba. Situated on the north-west coast it has a magnificent harbour crowded with ships from all quarters. Set in rich tropical vegetation the city consists of the old and the new towns, the former narrow and cramped, the latter with wide streets, squares and parks, well built houses, shops, theatres, hotels, restaurants and cafes, all of the most modern and in striking contrast with the fascinatingly quaint architecture of the old town.

Though its chief note is still Spanish, Havana tends increasingly to become cosmopolitan. Naturally there is a strong American element. The large and growing American colony has its own club, hotel and family associations, and the American spirit is seen in a

certain quickening of the activities of the city. A considerable Canadian colony also flourishes. Many foreigners have permanent residences in the fine western suburb Vedado which has sprung up behind the Malecón, the splendid driveway along the sea wall westward which Havana owes to the American occupation.

Formerly the Prado, as the sole fashionable promenade was an epitome, at once gay and dignified, of Cuban life, the Prado with Central Park and its big hotels is still fashionable but it now shares that distinction with the Malecón into which it leads on the north. Every afternoon these two streets or rather avenues are the scene of almost interminable processions of people in motor cars and carriages and on foot or on horseback with halts in the squares in front of the hotels and cafes where their friends are sitting, chatting or listening to the bands and awaiting their arrival.

Santiago, Havana's old time rival and the former capital is still a very important town with a large volume of shipping particularly of ores from the mines of the Sierra de Cobre. Its harbour is one of the best in the world, and the city itself, built on the foothills of the majestic sierra, has a most imposing appearance. It too has an old and a new town but the greater part of the former was destroyed by earthquake. Its climate is hardly so good as that of Havana, which is easily the centre of the life of Cuba—commercially, financially and politically.

CUBA GEOGRAPHICAL SUMMARY

Natural Division. Mountainous island with an east-west axis, a relic of the mountain chains of the ancient continent of Antilia. (See America North.) The Central Limestone heights are a karst region. (See the Carso (Italy North) and Dinaric Alps (Serbia).)

Climate. Oceanic and insular, largely influenced by the north-east trade winds, which make the north-east the wettest regions. Tropical in temperature and in the two seasons, a hot wet season and a cool less rainy season.

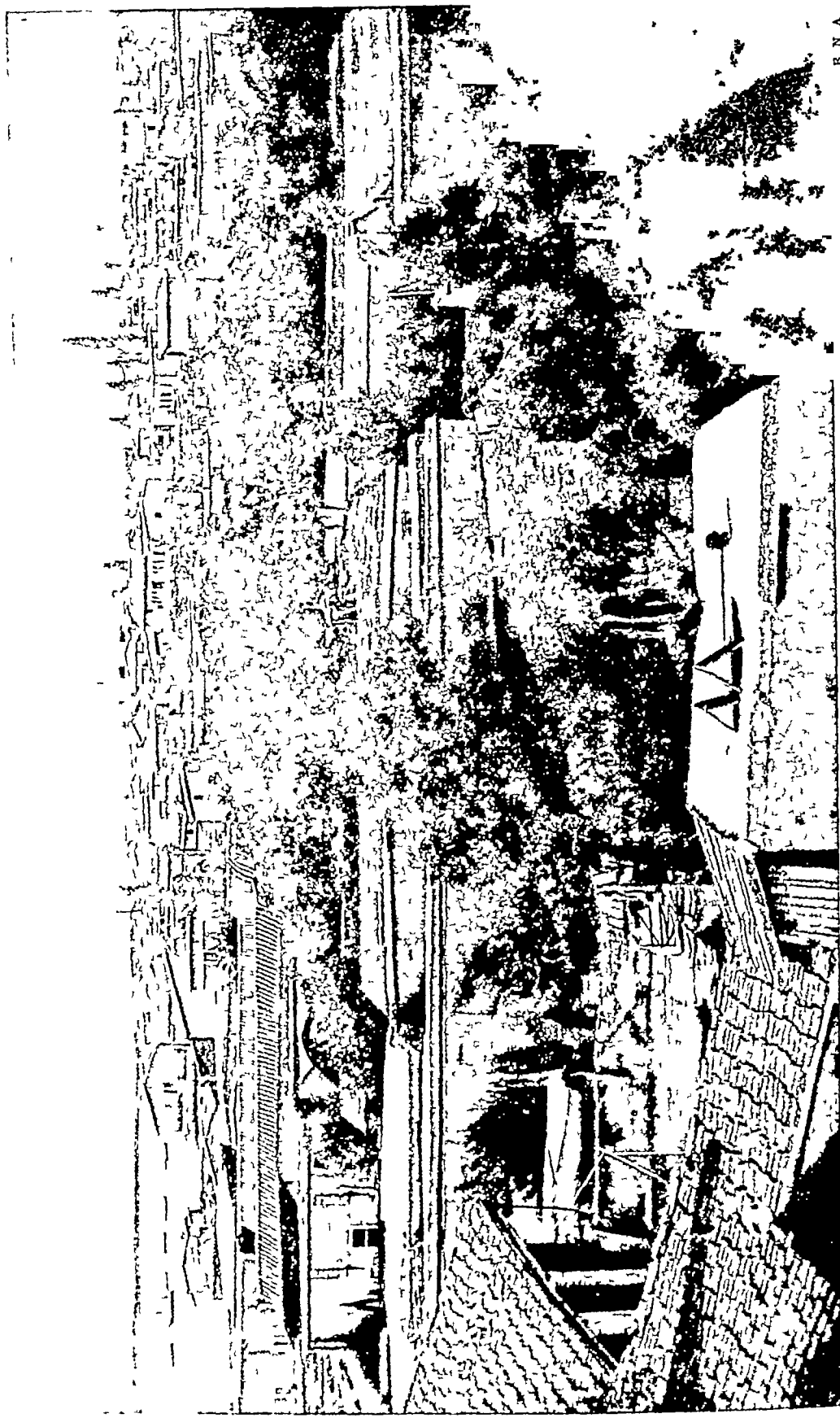
Vegetation. Jungle forest (on uncleared lowlands), mangrove swamps on coasts,

Virgin forests of mahogany and cabinet wood on the slopes, grassy uplands on the heights. Cf Colombia.

Products. Tobacco, cane-sugar, timber, fruit, copper, petroleum, asphalt.

Communications. External, ocean-going ships for the great exports, chiefly to U.S.A. Internal, railways.

Outlook. As a semi-dependency of the United States and as a source of the sub-tropical products which that country lacks, Cuba more than Hawaii or the Philippines depends for its future upon its great continental neighbour.



B N A

HARBOUR OF LIMASOL, GREAT EXPORT CENTRE OF CYPRUS FOR CAROB BEANS AND WINES

Hardly less important as a harbour than Larnaka, from which it is 37 miles distant, Limasol lies on Akrotiri Bay on the south coast, but in appearance is far more up to date as the great export of carob beans, wines and spirits which it enjoys gave it a start over the other towns. Further exports consist of raisins, pinyon of Paphos and salt. Here it was that Richard I of England married Berengaria, which recalls the fact that this is not the first time that Cyprus has been in British possession. It was that monarch captured the island from the Byzantine prince Isaac Comnenus in 1191 though selling it later to the Knights Templars.

CYPRUS

Ancient Source of the World's Copper

by C W J Orr, C.M.G.

Author of *Cyprus under British Rule*

THE island of Cyprus lies in the extreme north-east corner of the Mediterranean being distant some 60 miles from Syria to the east and 40 from Anatolia to the north. Its extreme length is 140 miles and its breadth at its widest part 60 miles.

The western half of the island is a tumbled mass of pine-clad mountains rising at one point to a height of over 6 000 feet and covered with snow in the winter while the eastern half consists of a low-lying alluvial and treeless plain, burning hot in summer fringed on the north by a line of hills rising steeply from the coast. A long and narrow tongue of land some 10 miles in breadth and 45 in length juts out in an easterly direction from the north-east corner of the island, giving it the appearance of a clenched fist with the index finger extended.

Of rivers Cyprus possesses none worthy of the name tiny tinkling streams descend from the hills to the plain where they lose themselves in the soil save at the height of the rainy season when occasionally a swollen torrent makes its way in full spate along some dry channel and pours its contents into the marshes near the sea.

Harbours of Phœnician and Venetian

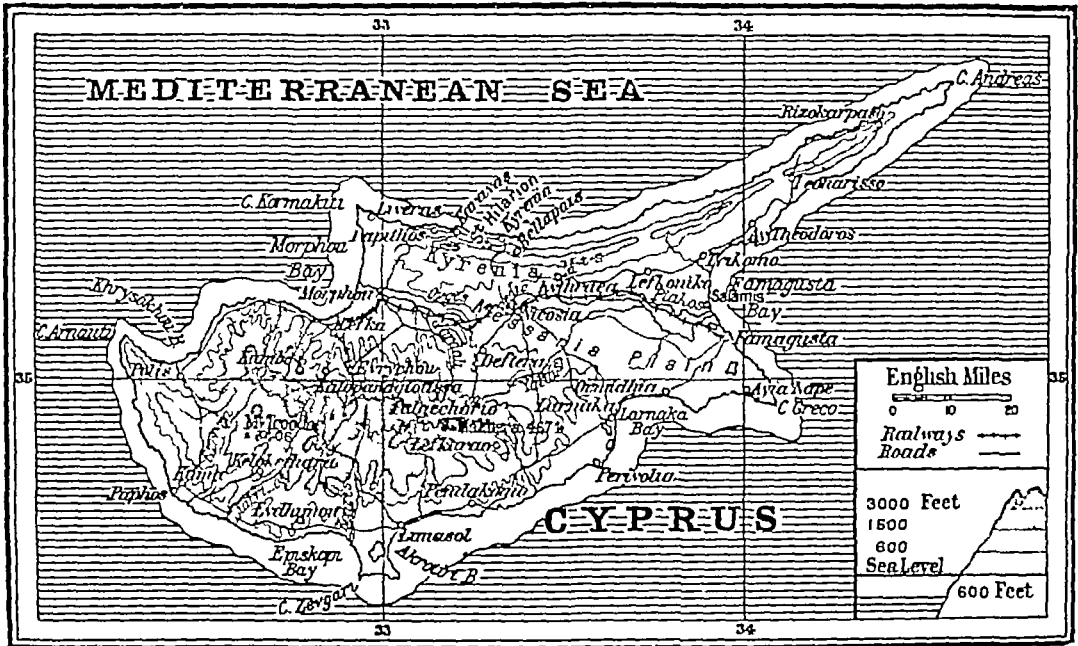
The coast line is broken by many bays and capes but there are no natural harbours of any size. On the north there is at Kyrenia a small indentation used as a harbour centuries ago by the Phœnicians part of whose handiwork is still visible in the form of a shapeless but picturesque mass of masonry said to have supported a lighthouse. On the east coast is a small enclosed harbour and breakwater on

the site of the old and once renowned Venetian port of Famagusta although it is small the vessels that use it can discharge direct on to the quay and into the railway trucks. On the south coast there are good and safe open anchorages at Larnaka and Limasol where ships can lie and, except in stormy weather discharge and load cargo by means of lighters. Larnaka was formerly the great trade port of the island and its commercial centre.

Extremes of Heat and Cold

The climate of Cyprus is similar to that of Syria and the eastern Mediterranean the heat in the plains during the summer months being intense and the thermometer registering anything up to 110 F but from October to April the temperature is delightful. In December and January fires are necessary for comfort and frosts though light ones are not uncommon. In the hills the climate during the summer months is almost perfect—dry and bracing, with a hot sun during the day and cool starlight nights while in the winter snow falls and lies for weeks together and the cold is comparable to that of an English winter.

The rainy season extends from about November to April little rain falling during the remaining months of the year. The total rainfall throughout the island averages about 23 inches the bulk of the rain falling during December and January when very heavy rain storms are often experienced, flooding the plains and bringing torrents down from the hills. During February and March comparatively little rain falls while about April in a normal year there are a few heavy showers.



STRANGE OUTLINES OF CYPRUS LIKE A POINTING HAND

After the harvest in May rain rarely falls until the following November, and during this interval the soil becomes parched, cracked and dry. Attempts have been made to collect the surplus rainfall of the winter into reservoirs where it can be distributed to the neighbouring farm lands.

Cyprus is essentially an agricultural country and the alluvial plains of the central and eastern parts of the island are covered with fields of wheat or barley. The Cypriot peasant has been accustomed to cultivate these cereals from time immemorial, and for long continued the methods which he inherited from his forefathers without making any attempt to improve on them. The seed is still hand sown and the harvest when ripe reaped with a common hand sickle. The threshing is carried out on an open paved floor by driving over the sheaves a primitive instrument composed of a couple of rough boards studded with flints. The corn is winnowed in the evening breeze and stacked in great heaps whence it is eventually taken away, either to the farm houses or to be tied up in stacks for export, but threshing and winnowing machines are coming into increasing use. Besides barley and wheat, cotton, maize, beans, vetches, sesame and

millet are grown, for in spite of the long summer months of drought the peasant manages to keep his fields irrigated by means of wells, there being always a plentiful supply of underground water. The method of irrigation is simple and of great antiquity, chains of wells are dug and connected by tunnels, and the water is drawn up into a tank by means of a wheel worked by an ox or a donkey.

The people are extremely clever in matters of irrigation, but under Turkish rule numbers of wells were destroyed, and in many cases the peasants lack capital to reopen them. Modern air motors, however, have lately been brought into use and are to be seen dotted about the central plain and in large numbers along the southern coast.

Hardly less important to Cyprus than its agriculture are its trees and forests. The mountains of the western half of the island are covered with pine and cypress and the whole island boasts of an area of over 200 square miles of first-class timber forest, there is a further area of 500 square miles of mixed timber and scrub which, like the former, is under the management of a government forestry department. Egypt and Palestine were entirely dependent on Cyprus during the Great War for fuel.

One of the most lucrative products of Cyprus is the carob trees which are cultivated in large numbers in the foothills along the northern and southern coasts and provide the celebrated carob or locust bean which is exported to the British Isles and elsewhere for the manufacture of cattle food. The tree was liable to be attacked by various insect pests which either destroyed or damaged the fruit, but a close investigation of the life history of these pests has been carried out and it is hoped that they may in time be wholly eradicated. The olive is grown in great quantities in Cyprus, most of the trees are grafted and cultivated and produce fruit of an excellent quality. The oil they yield is usually unfit for export being left unclarified to suit the local taste, but some of the islanders are now competing with clarified oil in foreign markets.

In the hill villages a considerable number of fruit trees is cultivated and Cyprus exports to Egypt figs, oranges, lemons, plum, apricots, peaches, walnuts, cherries, grapes, pomegranates and apples. There are also in the hill districts extensive vineyards. In ancient times the wines of Cyprus enjoyed a great reputation, for instance the famous old Commandaria, those manufactured to-day however although improving somewhat in quality are exported chiefly to Greece and Egypt.

The government maintains a model farm near the capital where live-stock is reared and distributed over the island. Thoroughbred horses have been brought out from England and pedigree bull, rams and boars are also imported from time to time so that Cyprus stock is gradually improving and already commands good prices. Large flocks of indigenous sheep and goats are also



ST HILARION ONCE THE STRONGEST FORTRESS OF THE ISLAND

When we get up into the central highland, it is easy to realize how it was that Cyprus once supplied the timber for the great fleet of the Ptolemies. Here however by the northern coast the pine forest have been reduced to a scattered remnant. The ruin in the photograph are those of the ancient fortified post of St. Hilarion, relic of Lusignan days in the hills above Kyrenia.



Sir A. H. Young

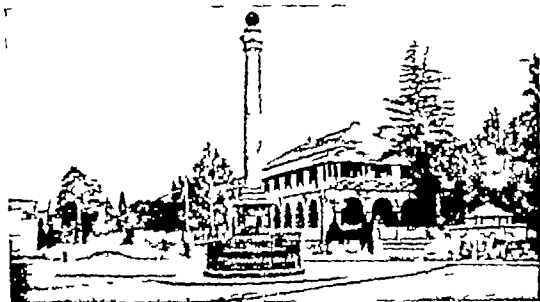
CATHEDRAL OF S. NICHOLAS AND RUINED CHURCHES IN THE BEAUTIFUL FALLEN CITY OF FAMAGUSTA

Now Famagusta has fallen from its high estate is vividly shown by this photograph, where miserable hovels are seen clustered round the ruins of ancient churches, of which the fourteenth-century Gothic Cathedral of S. Nicholas, now a mosque, rears its lovely form in the centre. About 300 churches mark its ancient prosperity and its condition is improving again, in consequence, while a light railway connects it with Nicosia and Venetian rule. Today it has modern harbour works. The district is mainly agricultural being noted for its pomegranates.

maintained and pick up a scanty living from the young grass which springs up everywhere after the first rains. The sheep are of the fat tailed variety carrying a fleece of from 4½ to 6 lb in weight and the number in the island is something over a quarter of a million. Their wool is considered by experts to be particularly fine for carpets.

ore has been found to make at least one mine a profitable concern.

Besides copper Cyprus produces magnesite, gypsum and a beston. Of the latter immense quantities are present in the hills near the summer capital of Troodos which lies in the hills 5,000 feet above sea level and close beside Mount Olympus. The a beston



GOVERNMENT BUILDING IN A NEWER QUARTER OF NICOSIA

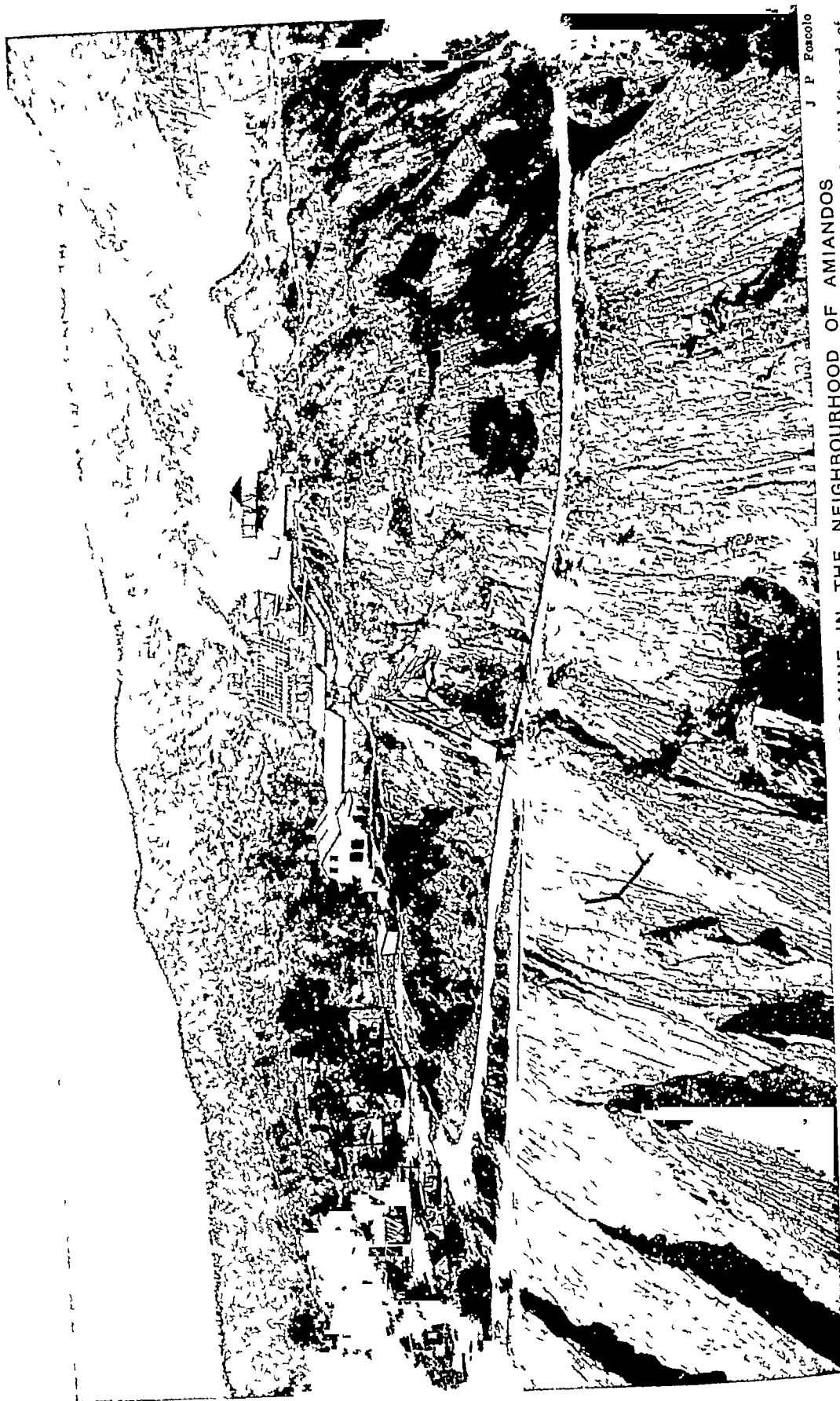
In Roman times New Paphos on the western coast, was the capital of Cyprus, now Nicosia is the centre of government, and has been since the Venetian occupation. After the cession of the island to Great Britain for administrative purposes in 1878, and its annexation from Turkey in 1914, modern bodies have sprung up like this government building behind the old column of B. Mark.

The goats although they do much harm to the forests are absolutely necessary for the peasantry and in spite of elaborate legislation against them are not decreasing in numbers. The mules and donkeys are thought to be the best in the world for pack purposes.

In olden days the copper mines of Cyprus were world renowned and the island provided most of that metal in use in the then civilized world. The copper deposits were first exploited by the Phoenicians and after them by the Romans, whose old workings are still visible. Little was thought to be left except ore of a low grade this, however contains by-products which combine to render its extraction a profitable undertaking if conducted on a large scale and indeed sufficient high grade

is of good quality and the main factor which has limited its export in the past is the difficulty and cost of transporting it to the coast. There is now however an aerial railway in use.

Before the British occupation in 1878 only one road existed connecting the port of Larnaka with the capital of Nicosia a distance of about 25 miles. A narrow-gauge railway constructed in 1905 which runs from the port of Famagusta in the extreme east to the capital Nicosia and thence to Morphou Bay on the west has been continued for a farther ten miles up into the foothills leading towards Troodos. Excellent motor roads have also been constructed throughout the whole island and a network of cart roads extends in every direction.

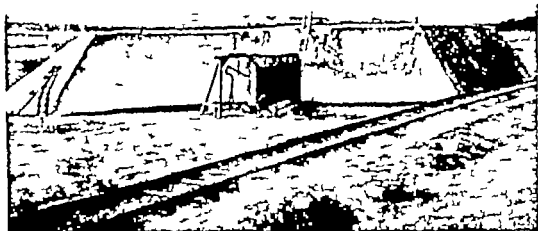


J. P. Pascolo

AMANDOS

BUSY ENTERPRISE ON A CYPRIOT ASBESTOS-MINE IN THE NEIGHBOURHOOD OF AMANDOS

Copper is the mineral for which Cyprus was most famed in ancient times, but most of it has been by now worked out, and though there is enough still left, and of sufficiently good quality, to support several mining enterprises, the supply seems inexhaustible, and in spite of great advances the export figures could be enormously increased. The one drawback is that it is of short fibre, but this is offset by an increasing demand for the short fibred variety while a superior quality has been discovered near Paphos



HEAP OF SALT FROM THE NATURAL DEPOSITS OF LARNAKA

One essential Cyprus has always depended on, but until heavy duties were decreased export to an extent was impracticable. To-day, however, salt is producing an increasing revenue and is showing the excellent quality future is predicted for the industry. It is deposited in lakes below the hills, chiefly near Larnaka and Limasol but which the sea percolates and evaporates.

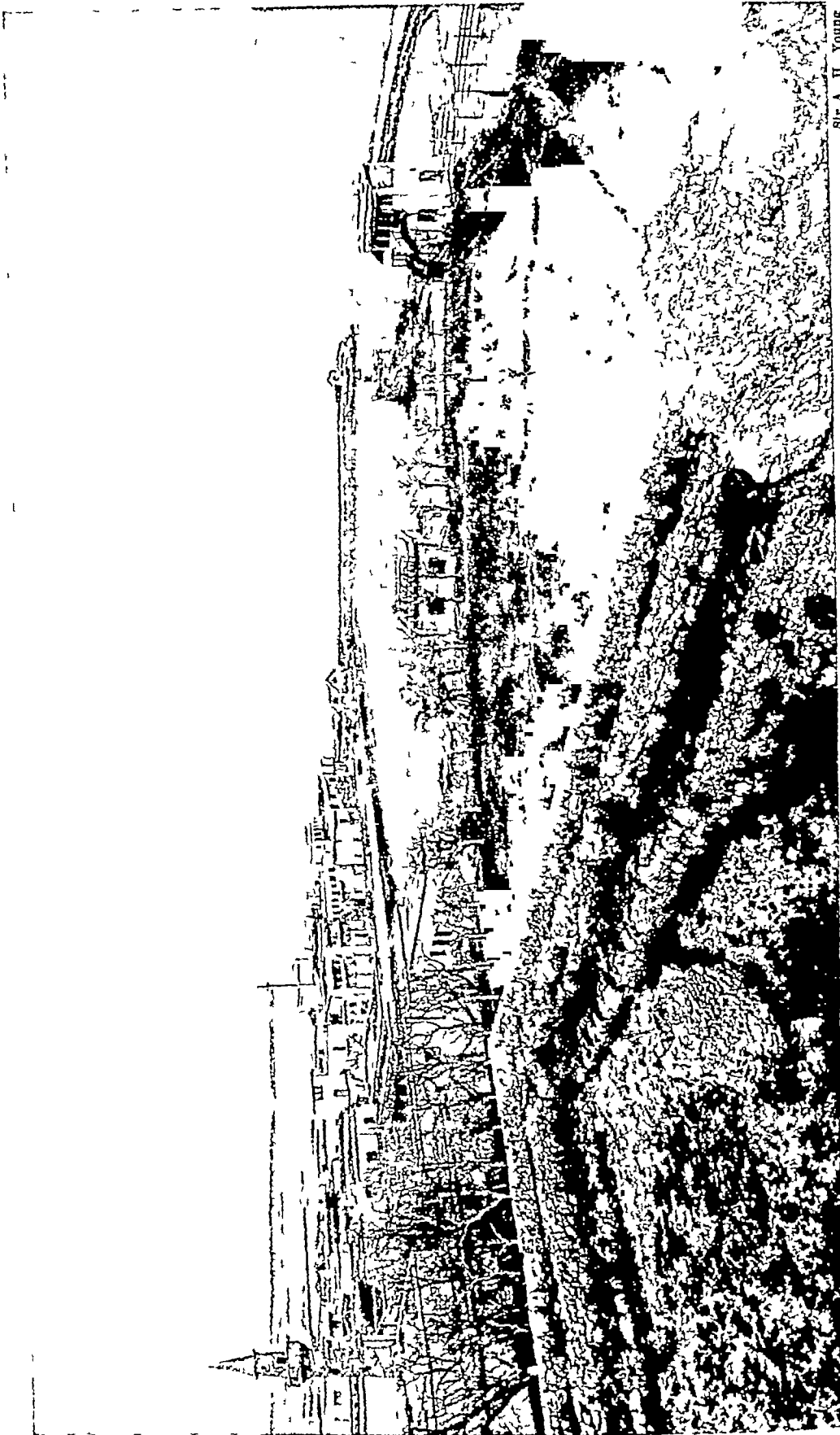
External communication is maintained by a subsidised line of steamers running every ten days between Cyprus and Egypt a distance of about 760 miles while ships of several well known lines call at frequent intervals. The voyage from Port Said to Famagusta occupies about twenty three hours and from Port Said to Limasol about nineteen hours. In the summer months it is possible to leave Port Said shortly before noon land at Limasol early next morning and travelling by motor-car from there ascend the well-graded road and reach Troodos 35 miles distant in time for a late breakfast in the cool pure air amid the pine trees.

The exports of Cyprus consist mainly of carob beans livestock wine barley potatoes and raisins. Fruit and vegetables are exported to Egypt and a fair trade is done in cotton flax sponges and gypsum. Hides are attracting attention by reason of the very fine leather they produce and silk of an excellent

quality hitherto exported solely in the form of cocoons will in future be manufactured on the island itself. Copper and asbestos have been noted.

Imports consist mainly of flour sugar cotton and woollen goods, tobacco leaf and machinery. On the majority of articles a 10 per cent ad valorem import duty is charged but on certain articles a specific duty is payable while some—mostly goods imported by the government for use in the public service—are admitted free of duty.

Cyprus numbers but six towns, all seaports except the capital Nicosia which lies in the centre of the island in the great plain through which the railway runs. They possess the characteristics of most towns in the Levant picturesque old bazaars still remain but modern buildings and electric lighting are steadily becoming the rule. The old Gothic Cathedral in Nicosia is now a mosque conspicuous by the graceful minarets which surround



Sir A. H. Young

VIEW OVER THE HARBOUR OF BEAUTIFUL, PEACEFUL KYRENIA ON THE NORTHERN COAST

On the north coast of Cyprus, which for an island lacks good harbours, the only roadstead is at Kyrenia. Here, as this photograph shows, there are moles enclosing a small stretch of protected water, but the port cannot be called a busy one. Its situation, however, is delightful, and an increasing number of people are resorting to such sea coast towns to enjoy the splendid winter climate, so that in time Cyprus may become a second Madeira. The minaret on the left is a relic of Turkish rule; the numbers of Turkish Mahomedans on the island seem to be decreasing.



CYPRUS



CAMELS RESTING IN A STREET OF LIMASOL

Lying as it does on the very frontiers of East and West, Cyprus is a blend of contrasts. The long Turkish domination has studded the island with minarets, many of them attached in the most incongruous way to older churches, but Christians predominate, and the Cypriot Church is independent from the Greek. These camels suggest the Orient, but the buildings look Western.



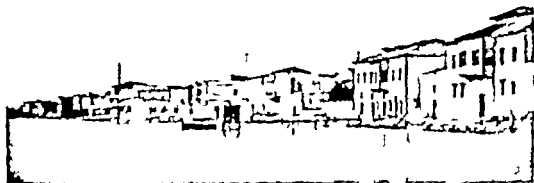
GREEK CYPRIOT HOMESTEAD AMONG THE HIGHLANDS

Modern methods of agriculture and higher standards of living are being steadily introduced into Cyprus, but the peasants, especially the older generation, are still very conservative. Village communities are either Greek or Turkish, sometimes mixed. This is one of the dwellings in a Greek community of the Kalopanagiotis highlands, the figure in black on the right being a priest of the Cypriot Church.

at Famagusta is a tumbled heap of old ruined churches and crumbling battlement with Othello's Tower overlooking the entrance to the harbour.

Limasol, the most modern town in the island, has had the benefit of a considerable municipal revenue from the fact that most of the carboys are shipped from there and was the first to be the first in the island to introduce

the whole of the remainder Greek Christians. Most of the inhabitants are of the peasant class engaged in agriculture. In the towns is a sprinkling of merchants, doctors and lawyers who have received their professional education in Athens, Paris or London. The Greek speaking inhabitants are intelligent and possess the qualities of the Levantine Greek. The Turks are



WATERFRONT OF THE ISLAND'S CHIEF SEAPORT LARNACA

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electric lighting and lay out public gardens with fountains and modern attractions. The old fort exists—it is used as a civil prison—and the traveller is shown the chapel in it where Richard Coeur de Lion is said to have been married to Berengaria. Paphos and Kyrenia are little deep, hollow, wonderfully picturesque and redolent of bygone ages but of small commercial or other importance unless thanks to their beauty and their climate they develop into winter resort as they well may do.

The population of Cyprus as recorded in the census taken in 1921 is 310,715, about one-fifth being Moslems of Ottoman Turk origin and practically

rapidly losing to their more astute Christian competitors the landed wealth which they once possessed. There are a few colonies of Jews and Armenians and the higher administrative posts are filled by Englishmen.

Even after Cyprus was relieved of the yoke of Turkish administration or mal-administration in 1878 progress was slow, but since the formal annexation in 1914 when many of the younger generation went abroad as drivers during the Great War there has been a tremendous influx of new ideas and the island looks fair to recover some of that prosperity which history shows that it held in the early days of civilization.

CYPRUS GEOGRAPHICAL SUMMARY

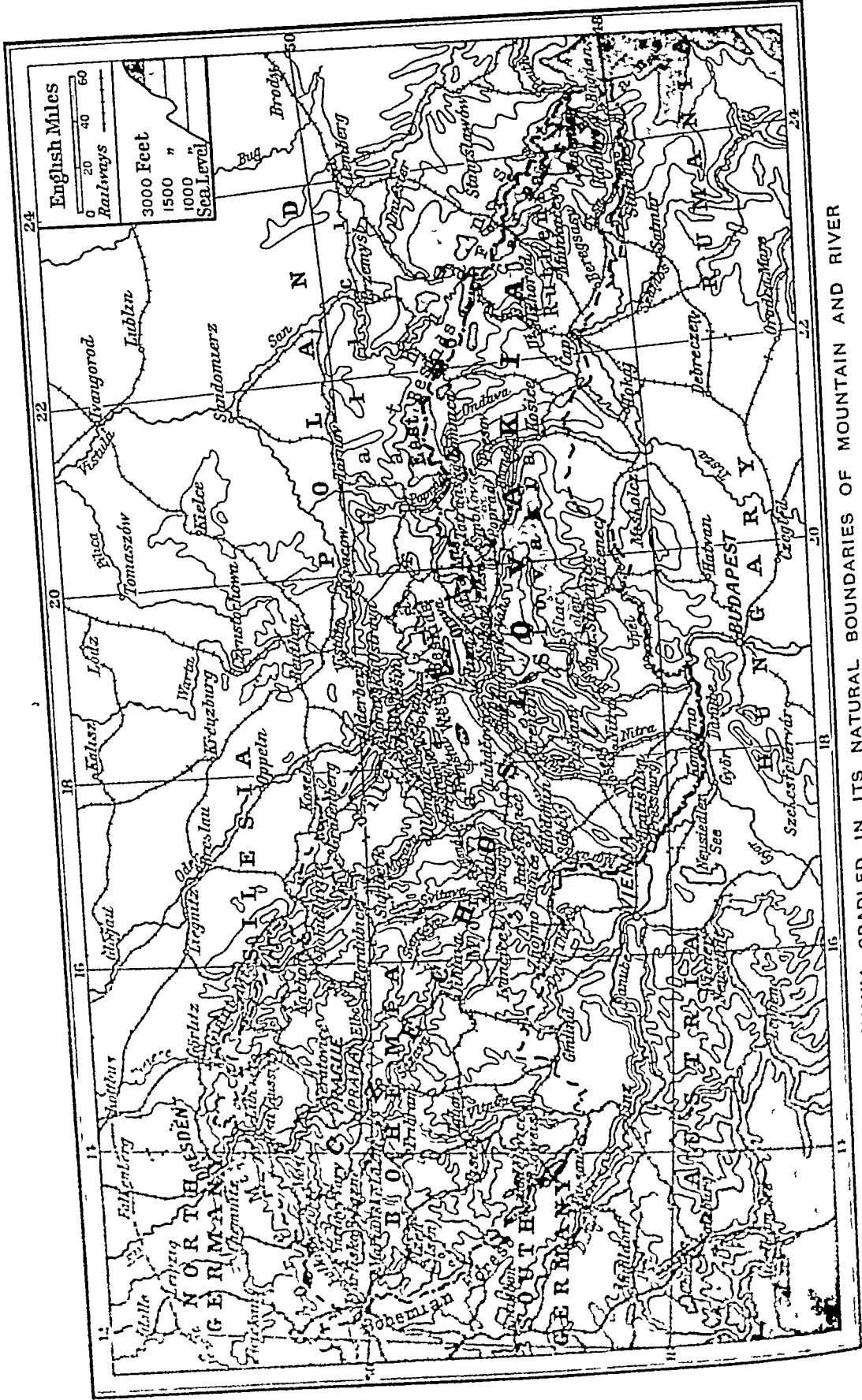
Natural Division. Mountainous island connected with Crete and the Taurus Mountains. Eastern lowland.

Climate and Vegetation. Spring is the best season. Cf. Corsica, Crete. Winter rains with a total fall less than the driest parts of England. Evergreen forests on heights, cypress trees among foot hills.

Products. Wheat, barley, millet, grown in fields irrigated from supplies of under-

ground water. Cf. Riverina Australia. Destructive goats, olives, wines, raisins, Copper, asbestos.

Outlook. Except for minerals, Cyprus has hitherto relied largely on Egypt for trade. Cf. Channel Islands and Southern England. Its future lies in the slow awakening of the Levant generally from the lethargy everywhere engendered by the paralyzing hand of the Turk.



CZECHOSLOVAKIA CRADLED IN ITS NATURAL BOUNDARIES OF MOUNTAIN AND RIVER

CZECHOSLOVAKIA

Southward Valleys of the Carpathians

by Henry Baerlein

Author of *Over the Hills of Ruthenia*

IN the case of Czechoslovakia those who after the Great War were engaged in remaking the map of Europe found their task easier than in most other parts on account of the mountain ranges with which a great deal of that republic is surrounded. This is notably the case with regard to Bohemia the northern province of the republic, which is dealt with in another chapter. And Moravia (with Silesia) Slovakia and Ruthenia—the remaining provinces which we have here to consider—are well provided on their northern frontiers with a mountain wall.

Scarcely any frontier could be more perfect than that between Slovakia and Poland which runs along the bare and magnificent Tatra Mountains. But the frontier at both extremities of these mountains is for many leagues just as gratifying to the impartial map-maker. These ranges are the West and the East Beskids while Ruthenia is divided from Eastern Galicia (that is to say Poland) by another section of the Carpathians.

The curiosity of the frontier line is the busy town of Těšín (Teschen) whose destiny was for a considerable time in suspense. Czechoslovakia, Poland and their Allies debated the question from all sides and not always very calmly. The solution was to allot a part of the town to each of the two claimants and as a river flows conveniently through it, this solution has been found to be quite workable.

Stable Course of the River Danube

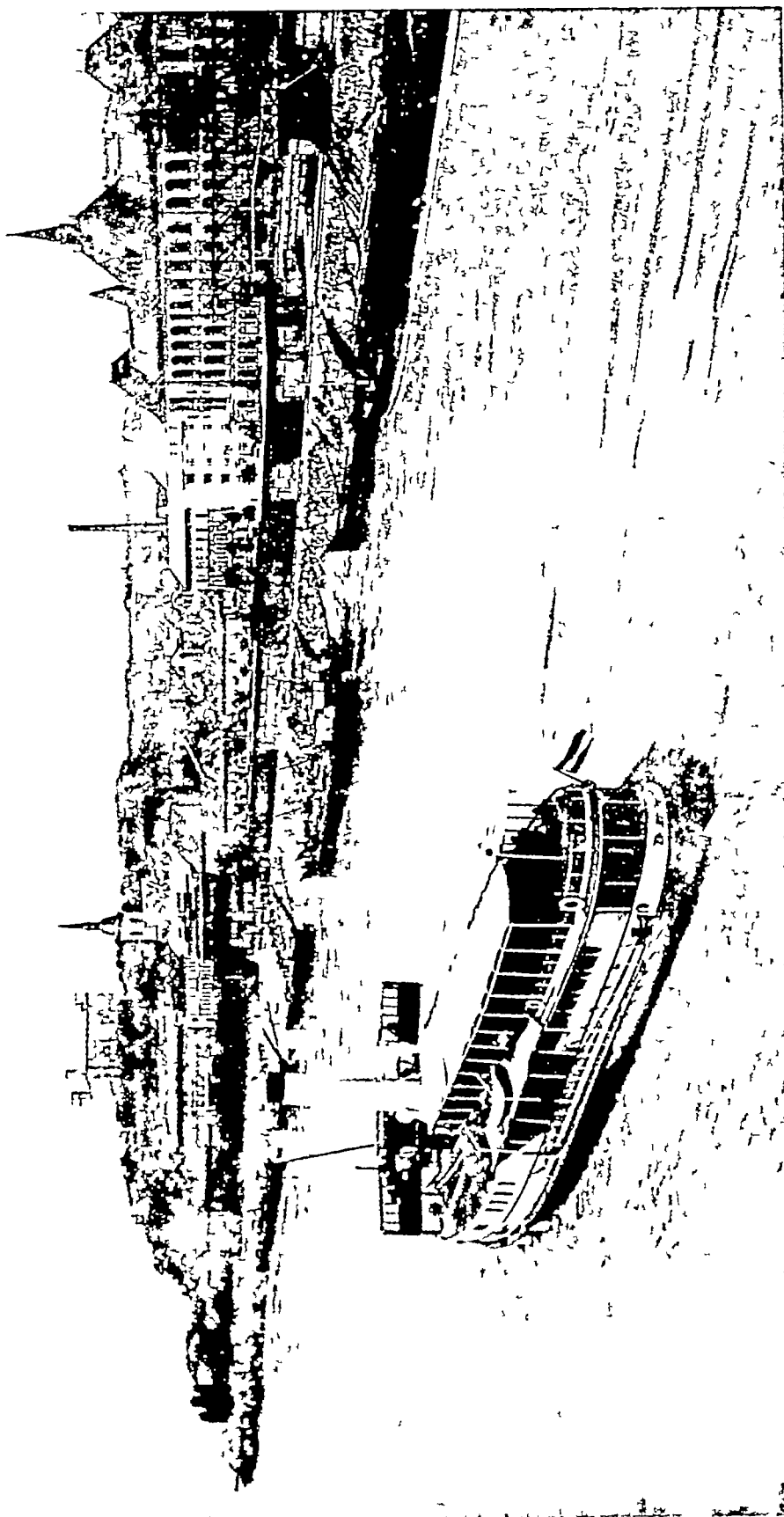
The southern boundaries of Moravia, Slovakia and Ruthenia are largely formed by rivers and in so far as these are of appreciable width they are only less perfect than the northern moun-

tains. The Danube does not like the Rio Grande change its course nor does it flow intermittently down various channels, as Professor Cvijic the great geographer of Belgrade University has shown to be the case in the province of Bačka (where the difficult frontier is between Hungary and Yugo-Slavia). These peculiarities are not exhibited to any noteworthy extent in the reaches of the Danube which divide Hungary from Slovakia nor yet in the rivers Morava and Jpel which, on this and on that side of the Danube form the continuation of the frontier line.

Anomalous Frontiers of Ruthenia

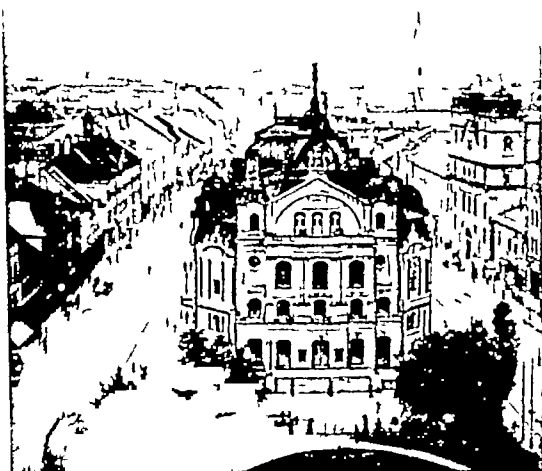
It may therefore be said that the provinces we are considering have little to complain of with regard to the various obstacles which nature has placed between them and their more or less friendly neighbours. But about half the southern frontier of Ruthenia is merely a line drawn along the plain and in the other portion the map-makers have failed very lamentably to avail themselves of the assistance given to them by nature. At the far end of Ruthenia—a province which is also known by the name of Sub-Carpathian Russia—there stands on the left bank of the rushing river Tisa (Theiss) a chain of mountains that should quite obviously have been the frontier between Ruthenia and the kingdom of Rumania, apart altogether from the fact that the inhabitants of that small territory between the river and the mountains are as much Ruthenian as are those others on the right bank.

It was seen fit to take the river in preference to the mountains as a boundary with the result that a small



VIEW OF BRATISLAVA, WELL-KNOWN PORT AND HISTORICAL CITY OF CZECHOSLOVAKIA ON THE DANUBE

Bratislava in Slovakia more familiarly known by its German name Pressburg and its Hungarian name Pozsony, was the former capital of Hungary, many kings of Hungary, were crowned in the ancient Gothic Cathedral of St. Martin, and here the Hungarian Parliament met in the Landhaus until 1848. Beautifully situated on the vine clad spurs of the little Carpathians on the left bank of the Danube, the city has an imposing aspect and is dominated by the castle hill, where, even as the departed potentate it a height of 270 feet above the river, the ruins of the royal palace, formerly the residence of the Hapsburg kings, are still standing



OVERLOOKING THE MUNICIPAL THEATRE AND MAIN STREET OF KOSICE
Kosice is the official name for Košice, a former free city of Hungary, is now part of the Czechoslovak Republic and the most important town in East Slovakia, having considerable strategic prestige in connexion with the routes across the Tatra Beskids. Among notable buildings are the free museum and the cathedral of St. Elizabeth, whence this view is obtained.

portion of Rumania is now only accessible to the rest of that country by a railway which traverses Czechoslovakian soil and a larger portion of Czechoslovakia suffers in the same fashion. The last Ruthenian valley embracing Jasne Rahovo Bogdan pasture-lands and great forests is cut off from the remainder of the republic (except by way of precipitous mountain tracks) whereas the part of Rumania which is separated from the parent country is of such insignificance that the two Rumanian trains which are every morning and every evening, brought into the district run with scarcely any

passengers they are merely a somewhat expensive political demonstration.

Yet on the whole Moravia, Slovakia and Ruthenia are well entitled to be satisfied with the various walls that nature has given them. They are united to one another (and to the province of Bohemia) just as they are separated from the surrounding states. Of course, in a country of the area of Czechoslovakia it is to be expected that there should be local variations in climate as in other respects. As a political unit Czechoslovakia arose out of the Great War. It is an association of Slav peoples which by their own efforts and



SCENIC SPLENDOUR OF THE HIGHLANDS OF NORTH SLOVAKIA

The Carpathian range attains its most majestic beauty in the High Tatras, where above the valleys of the Váh and Poprad some of the peaks rise to an altitude of over 8,000 feet. In this walled region the country is a vast, rocky, snow-capped peaks and verdant valleys set lavishly with forests of spruce, fir and larch, with patches of alpine meadow in vivid contrast to the dense coniferous forest.



REST HOUSE IN A SECLUDED SPOT OF THE HIGH TATRA RANGE

Hidden away at the foot of steep mountain walls, this building, known as Malá's Hut, lies in North Slovakia on Popradské Pleso—a lake, at an altitude of 5,000 feet, whose crystal depths contain shoals of lively trout. Despite its solitary position, this small domicile keeps open house all the year round, and here the tourist can obtain an excellent meal, served on quaint Slovak pottery at a moment's notice.

with the assistance of the Western Powers, arose from the ashes of the Austro-Hungarian Empire. For centuries the Czech and the Slovak had lost their independence, but now the alien domination has been shaken off and the lands which once were ruled by native princes have regained their liberty.

Transport of Iron on the Oder

Yet Czechoslovakia is a land on which nature has smiled, and in nothing is this more obvious than in the chain of rivers. Taking only the provinces of Moravia, Slovakia and Ruthenia we have, in addition to the frontier rivers already mentioned, the Oder, upon which the republic has the right of international navigation, for as Hamburg is to the Elbe so is Stettin to the Oder. Up this river the very large imports of iron are made from Sweden, as yet the ships with this cargo can sail no farther than Kosel in Germany, but the remainder of the river is in process of canalisation, so that shortly they will be able to pass without interruption into Moravia. At Brno (Brunner), Moravia's busy capital, there are two rivers, the Svitava and the Svratka, which unite and later join the Dyje (in German called the Thaya), and this river, which for a portion of its course serves as the frontier with Austria, is well provided with hydro-electric stations.

estimated at only 800,000 h.p. annually, an annual saving of six million tons of coal will be effected, which is about twenty per cent of the entire coal output. In accordance with the Electricity Law of July, 1919, the state takes over the utilisation of water-power and construction of water-power plants while the construction of electric conduits and thermo-electric plants is left to companies, at least sixty per cent of whose capital is to be held by the state and local authorities, the remainder by private shareholders.

These rivers pass over a land in which all the phases of geological development are represented. For example, in northern and south-western Moravia the volcanic strata prevail. In the valley of the Morava, which cuts Moravia into two parts, and in the south of Moravia we find diluvial and alluvial sand and clay. The Slovakian mountains consist largely of granite, but elsewhere in that province, especially in the south, e.g. in the south of Ruthenia, we come again upon diluvial and alluvial deposits.

Effect of Climate on Agriculture

The climate forms a mean between the maritime and the continental. The rainfall is, on the whole, very even and is mainly confined to the summer, varying from about 20 inches on the lower and about 30 inches on the higher levels. The temperature varies with the altitude, the warmest part of the



IN MOUNTAINOUS SLOVAKIA A ROCK BOUND LAND OF ROMANCE

The Carpathian Mountains (Great Carpathians) are a long, narrow range of mountains stretching from the north to the south of the country. They are the highest part of the country and are the source of many of the rivers. The mountains are covered with forests and are a beautiful sight to see. The mountains are also a source of many of the minerals and metals of the country.



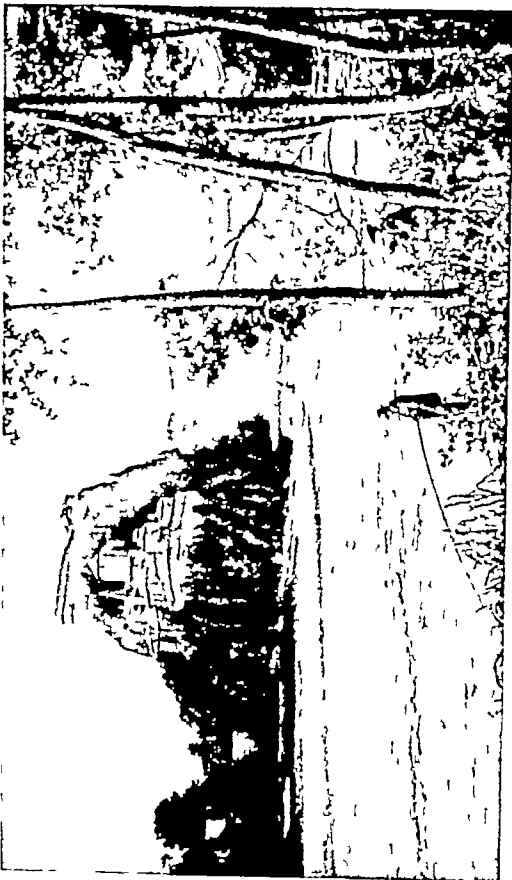
ON THE WAY FROM BYTBA TO BYTBSKE PLESO IN THE CARPATHIANS

The Carpathian Mountains (Great Carpathians) are a long, narrow range of mountains stretching from the north to the south of the country. They are the highest part of the country and are the source of many of the rivers. The mountains are covered with forests and are a beautiful sight to see. The mountains are also a source of many of the minerals and metals of the country.



IMPRESSIVE BEAUTY OF A WHITE WINTER LANDSCAPE AT TATRANSKA LOMNICA, A HEALTH RESORT OF SLOVAKIA

Czechoslovakia is rich in beauty spots and on the south slopes of the High Tatra range, which separates the Czechoslovak Republic from Poland, are many well known resorts famed alike for their health giving thermal springs and for the loveliness of their environs. At Tatranská Lomnica warm sunshine may be enjoyed in the depth of winter, here precipitous rock walls rise sheer from the valleys, their summits crowned with a coronet of eternal snow, while the lower slopes, rich in forests of coniferous trees and spread with a coverlet of chaste snow, sparkle and scintillate as with a thousand flashing gems in the golden glare of the brilliant sunlight



ONE OF NORTH SLOVAKIA'S HISTORICAL TREASURES ORAVA CASTLE CROWNING A PRECIPITOUS HEIGHT

Standing on a steep rock overlooking the river Orava in a district of the same name in North Slovakia, Orava Castle crowned a magnificent view of the surrounding countryside. The first records of the castle indicate its importance in the thirteenth century and the latter part of the sixteenth century, and then after the 1800s, contains two distinct fortresses, the higher one which stood on the latter part of the rock, now converted into a picture gallery, armory and museum, and the lower one with its little church, which was the original fortress. Below the castle are found a parish church, school and several houses belonging to the castle.

If the peasant spent more of his time in the open air he would no doubt present a still more satisfactory appearance, for there are parts, chiefly in Ruthenia, where the cottages have with few exceptions scarcely any modern amenities

Health-giving Waters of the Republic

Czechoslovakia, then, is a healthy land, and in addition is provided with a great number of health resorts. The most famous ones will be found described in the chapter on Bohemia. In Moravia the most important springs are found at Luhačovice, where the waters are of a solid gaseous variety containing bicarbonates, chlorine and sodium. In Silesia there is a similar establishment founded by the famous Priessnitz in 1826 at Grafenberg. Slovakia has many health resorts. Thus at Piešťany are hot sulphur springs, at Vyhne and Šliač ferruginous hyperthermal springs. The chief health resorts in the Tatras, especially attractive on account of the beautiful scenery, are Tatranská Lomnica (peculiarly adapted for winter sports), Štrbské Pleso (resembling in miniature the finest spots of the Rocky Mountains) and Smokovce, where unfortunately a conflagration has destroyed many of the trees.

Magnificent Stags in the Forests

The presence of these pine trees in other parts of the district renders it favourable for consumptives. Czechoslovakia is not a country in which the workers in certain regions have, for their health's sake, to migrate occasionally into other parts. There is nothing to prevent the peasant, the miner and the artisan from spending the whole year in perfect comfort at the same place.

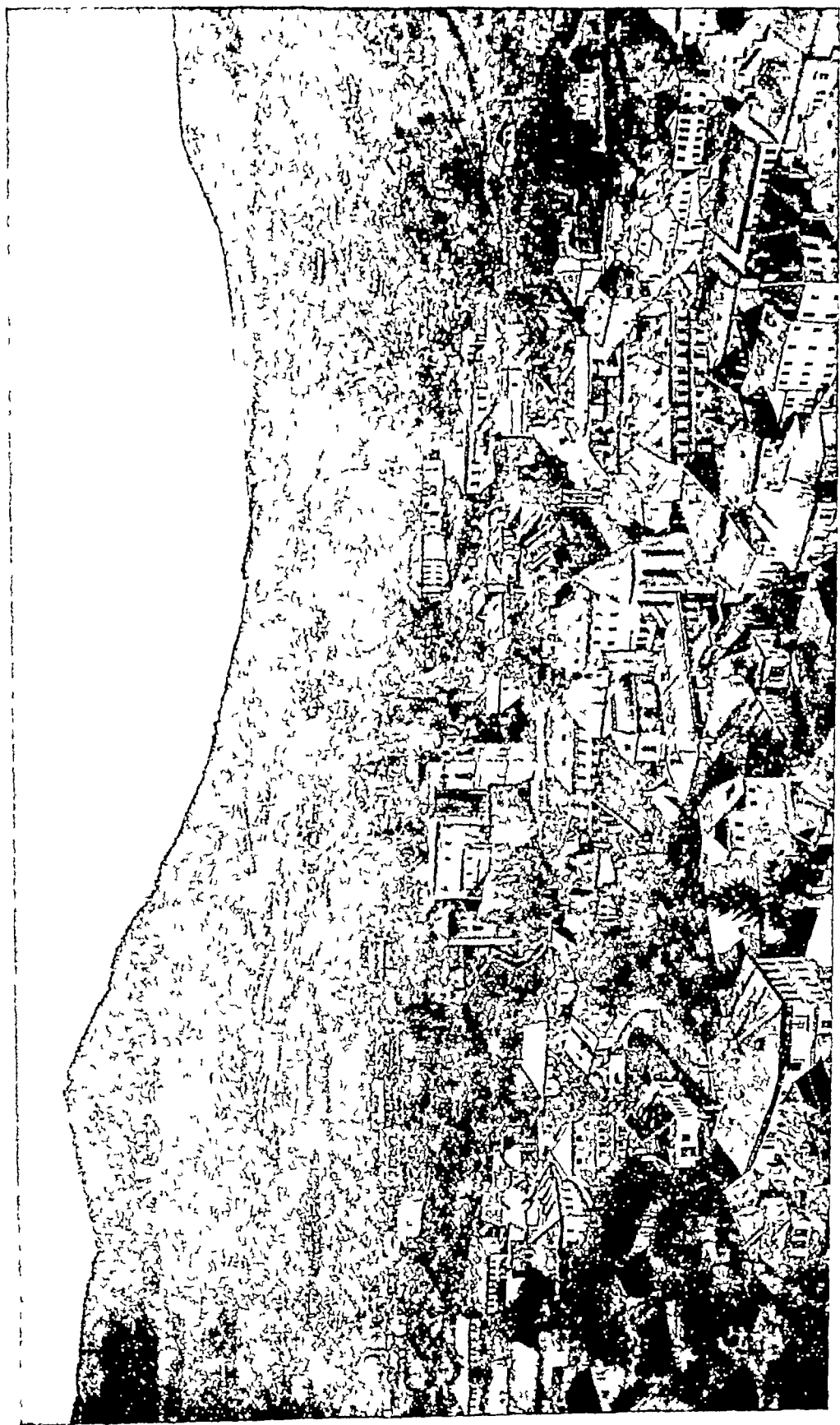
Moravia, Slovakia and Ruthenia possess wide areas of pasture-land, of arable land and of forest. These forests, which predominate in Ruthenia, are largely composed of beeches and magnificent oaks. They are the haunts of the wild boar, of the bear and of wolves, as also of a celebrated breed

of stags that is unsurpassed for size and comeliness in the whole of Europe. In Moravia and the less mountainous parts of Slovakia the fauna has more resemblance to that of Great Britain. After all, one half of the republic consists of arable land, only four per cent being unproductive, so that the intensity of cultivation compares very well with that of other states. In the Czech territories (Bohemia, Moravia and Silesia) there is, properly speaking, no unused land, since the four per cent of non-productive area referred to in the statistics is accounted for by the surface taken up by buildings, rivers, roads, etc. In Slovakia and Ruthenia it will be possible to increase the amount of arable soil.

Mining Regulations 700 Years Old

Underneath the soil Czechoslovakia ranks in the extent and variety of its mineral resources among the first countries of Europe. With the exception of platinum it possesses every useful metal. It is therefore natural that mining operations were carried on from quite early times. The mining regulations of Moravia, for instance those of Jihlava (from the year 1250), were adopted in other countries. Afterwards a decline set in and it was not until the end of the eighteenth and the beginning of the nineteenth century that mining industries were revived, largely owing to the great industrial development which was then taking place and which, with its growing demand for fuel, led to the exploitation of the rich coal-fields of the country.

To-day the coal-mines yield the heaviest output of any mineral products, and as regards the facilities for the training of mining engineers, there is a School of Mines at Příbram, while there is a similar institution at Banská Štýavnica, the latter being the oldest of its kind in the world. The most important coal-fields are those of Ostrava known for coal and the Most-Fallnov district for lignite. After the Great War there was a greatly decreased output due in part to the



SCHEMNITZ, AN ANCIENT MINING TOWN IN A SHELTERED VALLEY OF THE CENTRAL SLOVAKIAN HIGHLANDS
Schemnitz is the former German name for the mining town, now known as Štávnica or Štávnica. This ancient town, which existed as early as the eighth century, has a population of over 15,000 and is charmingly built in terraces in a narrow valley some 67 miles north of Budapest. It was once a royal free city of Hungary and has long been noted for its mines from which gold, silver, lead and copper have been obtained, although the present annual yield is relatively small compared with its former value. It is also the seat of a famous mining academy founded in 1760 by Maria Theresa.

glass making and the timber industry. The second group comprises industries obtaining only a part of their raw materials at home such as the industries producing steel iron the greater part of the metal industries together with the chemical and leather industries. The third group has to import the whole of its raw materials and this includes the textile and phosphate industries and various metal industries such as copper and nickel.

With regard to the first group Czechoslovakia is the only European sugar exporter and the second largest beet-sugar producer in the world. Most of the factories are situated in Bohemia but out of the total of 173 which were in existence before the Great War 65 were in Moravia and Slovakia. The French sugar factories produce an average 31,338 tons a month each so that the 45,000 tons capacity of one Bohemian factory and the 150,000 tons of a Slovak concern are very creditable.

Beet Sugar and its Control

In 1912 Czechoslovakia contained 186 factories of which 118 were in Bohemia and 68 in the provinces we are considering. The abnormal conditions of the Great War brought about by shortage of coal the lack of artificial fertilisers and the labour shortage had an adverse influence on the production of sugar beet but since the formation of the republic the situation has been rendered stable by the firm control exercised by the Sugar Commission and by co-operation on the part of the factories. This is especially applicable to the measures taken for assuring supplies of beet to each refinery.

The big companies are trying to extend their sphere of influence over a maximum number of sugar factories, thus ensuring a steady and regular supply of raw sugar for their refineries. Moravia with Silesia, possesses fourteen stock companies formed by beet growers. About half the supply of beet in these provinces however is raised on estates operated by the refineries. In Slovakia

also the refineries grow 90 per cent of their requirements on large estates which they operate themselves while the balance of the beet needed is supplied by small landowners under contract. The largest sugar factories sell their good through the banks that have special sugar departments.

Staple Ingredient of "Pilsner"

Before the Great War the largest buyers were Great Britain India Switzerland the Levant Turkey and Greece. The exports are centralised in the Czechoslovak Sugar Export Company of Prague which is under the control of the Ministry of Finance and the Board of Foreign Trade. There is every reason to believe in the future development of this industry. A sugar syndicate embracing the whole industry has been formed and this will henceforth supervise not only the relations between the wholesale traders and the refineries but the exports.

Moravia produces much of the malt which together with the Bohemian hops forms the staple ingredient of the world famous Pilsner beer. In the sixties of the last century the first malt factories were established in the Hana district of Moravia where the soil is of the most fertile character. In 1912 the republic contained 203 malt factories, 35 being in the hands of joint-stock companies and 168 belonging to private owners. The Czechoslovak Malt Syndicate in Brno includes almost the whole industry. The old installations are being replaced by modern machinery and the aim of the syndicate is to maintain and develop the excellent pre-War reputation of the malt.

Making of Beer Spirits and W

The beer brewing industry is for the most part situated in Bohemia where pride of place is held by the celebrated Municipal Brewery at Pilsen (Pilsen). It flourishes also in Moravia while the Jihlava district of Moravia and likewise Slovakia occupy themselves largely in the manufacture of liquors, using

potatoes and beet for their raw material. An important branch of the spirit industry is comprised in the manufacture of yeast. A new factory that will be one of the largest undertakings in the republic is being established at Dioseg in Slovakia. Its annual output of yeast will amount to 1,000 tons.

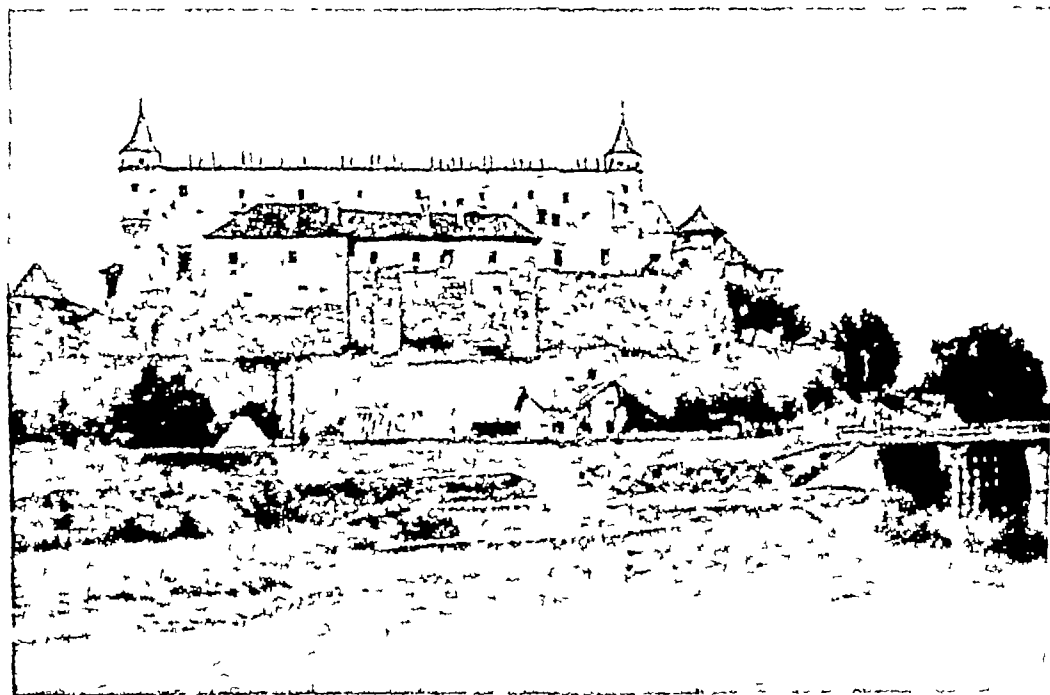
All the provinces are engaged in the wine industry. The home production, however, is inadequate and a considerable quantity has to be imported. Slovakia and Ruthenia produce the greater quantity of wine, that in the neighbourhood of Beregsasy in Ruthenia having, in many cases, much resemblance to Tokay, from which district it is not far distant. On the Ruthenian hillsides, growing in the famous dark red earth, the vines form a prominent feature. So much are the grapes in request that an armed watchman, with several fierce dogs, is permanently stationed behind the barbed wire of every vineyard.

The railway system under the old regime was constructed with an eye on

Vienna and Budapest, not on Prague (Praha) or Brno. That is why, for example, in March, 1920, the National Assembly allotted a considerable sum to the improvement of the service, double tracks are being installed on the main lines and new lines are being constructed.

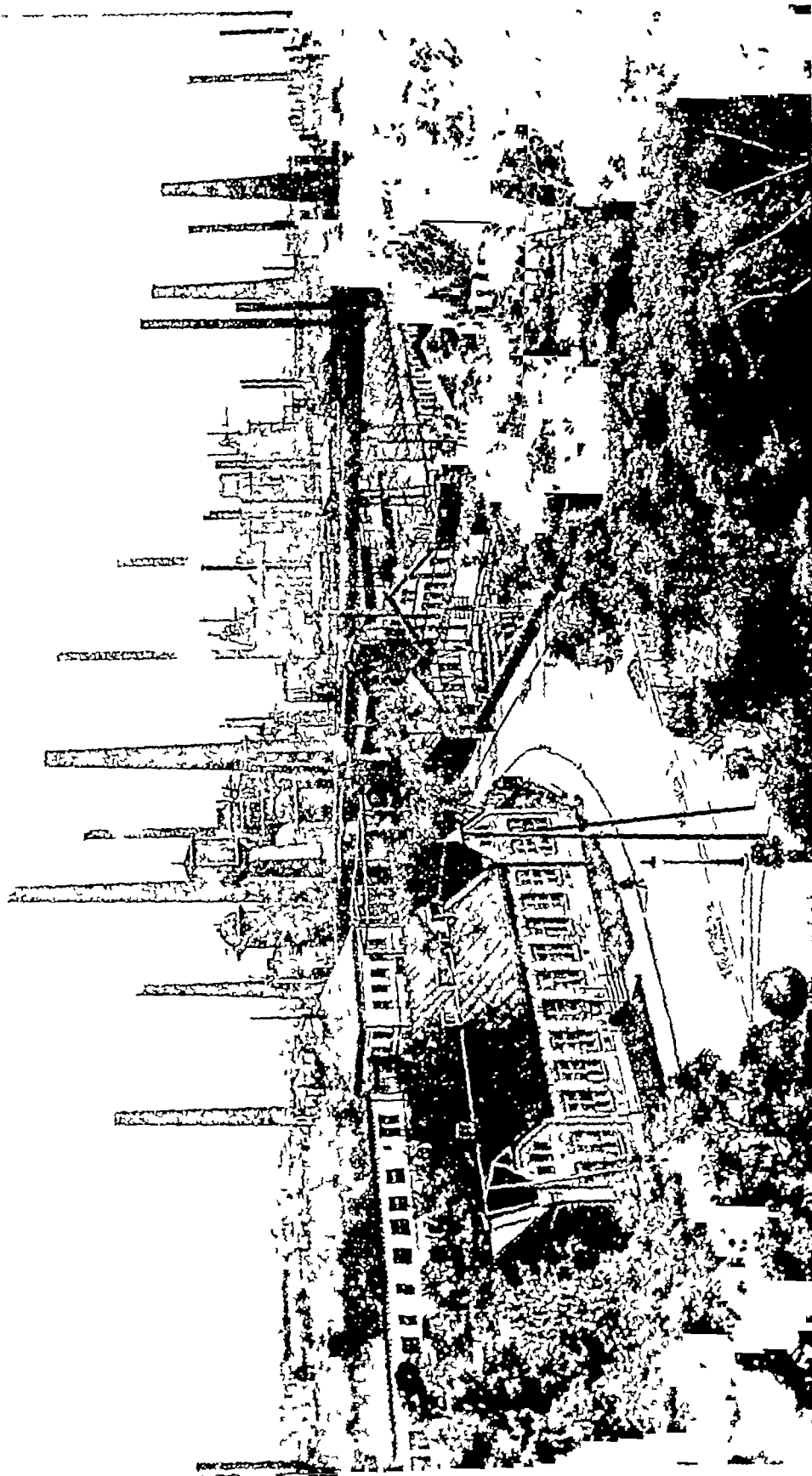
About 33,000 railway carriages, trucks and other conveyances which had belonged to Austria-Hungary were consigned to the new state, while between 1920 and 1922 the local workshops turned out 28,000 carriages, and anyone who has travelled in the republic will look back with pleasure on his experience. So advanced, indeed, is this special industry that Pullman cars are being made for American railways, not to mention those of European states, such as the Serbian lines.

The rivers are mainly of importance for goods traffic. We have referred to conditions on the Oder. As regards the Danube, there is no doubt that an extensive trade on this river may be anticipated. According to pre-War statistics nearly two million tons of goods



HOARY WALLS OF AN OLD-WORLD CHATEAU AT ZVOLEN

This ancient stronghold, often occupied by Matthias Corvinus, King of Hungary, who reigned in the fifteenth century, rises on the left bank of the Svratka near Zvolen, an old German family known by its German name Altsold. This town is situated on the Gurany or Hrona river, near the Loznicata and flowing into the Danube after a course of 272-150 miles.



Czechoslovak Legation

GLIMPSE OF THE FOUNDRIES AT VITKOVICE, A PROMISING CENTRE OF THE IRON INDUSTRY IN CZECHOSLOVAKIA

Czechoslovakia has an insufficient home production of iron ore and consequently is obliged to buy in foreign countries, despite this great disadvantage and the heavy expense that the purchase and transport of the imported iron ore incur, the iron and steel industry is flourishing and the yearly productive capacity of the republic's steel and iron works is estimated at 1,500,000 tons of steel and 1,700,000 tons of raw iron. Vitkovice, or Witkowitz, a town of Moravia lying about four miles south-west of Ostrava is noted for its extensive collieries and iron works and contains no fewer than eight blast furnaces.



BRIDGE OVER THE RIVER JIHLAVA BETWEEN DOLNI KOUNICE AND IVANČICE ON THE VIENNA BRNO RAILWAY

In 1923 the Czechoslovak Republic contained over 5,000 miles of rails, more than half of these are owned by the state, and, of the total, 1,000 miles are double-tracked. Owing to the former centralization upon Vienna, Budapest, Prague (Praha) and Brno, most of the important lines cross the republic. These lines are gradually improving. This bridge, constructed near the mouth of the Morava, connects the towns of Dolní Kounice and Ivančice (Kaučice Liberec) near the border of Moravia.



Kilophot Wien

PANORAMA OF ZNOJMO, A ROMANTICALLY SITUATED AND HISTORICALLY IMPORTANT TOWN IN SOUTH MORAVIA

Znojmo, or Znojm, lies amid picturesque and fertile environs on the Thaya river, some 50 miles south west of Brno by rail. Founded in 1226, the present town has many interesting associations, it was here in 1809 that the armistice between Napoleon I and the Archduke Charles was concluded after the battle of Wagram.

whole of Moravia by the Přerov-Bratislava canal, which is 112 miles long.

In order to reach those parts of the country where it has been too expensive to build railways, various automobile services are now running. A line of aeroplanes is in operation between Prague and Bratislava, which will probably be extended to Užhorod. The skill of Czechoslovak pilots was shown in the summer of 1923 when President Masaryk spent a long time in a castle in Slovakia, and a daily service was carried on between there and Prague without one hitch. However, it is not primarily the airways but the roads that are needed for a country's prosperity. In Czechoslovakia are regions insufficiently furnished in this respect and it often happens that the villagers combine to build them, aided by the Ministry of Public Works.

Before the Great War the Czechoslovak territories supplied the needs of the whole Austro-Hungarian Empire, and only about 30 per cent of the goods produced went to satisfy home requirements. As an independent state, therefore, Czechoslovakia possesses (on a pre-War basis) an exportable surplus of 70 per cent. Actually, production having increased since 1914, this means a far greater quantity of goods than was exported before the War. The trade of Czechoslovakia is that of an industrial country, importing chiefly raw material and foodstuffs, and exporting finished manufactured goods. Moravia has great iron and engineering works, northern Moravia is studded with important textile factories and the largest European cotton mill, employing some 8,000 hands, is situated at Ruzomberok in the province of Slovakia.

Owing to her geographical position the chief markets for Czechoslovak goods must, apart from Germany, necessarily be in the south and east, that is, in the countries formerly constituting the Austro-Hungarian Empire, the Balkan countries, Poland and Russia, the two last-named, when their political conditions have become

stable will be extremely important to Czechoslovakia both for the import of foodstuffs and raw materials and for the export of finished goods. Competition with the western countries will be permanently maintained only in the case of those products which are a speciality of Czechoslovakia. The largest export items for 1919 comprised sugar (49 per cent) coal and timber (18.6 per cent) while in 1920 wool and woollen goods formed 20.6 per cent, glass and glassware 16.3 per cent, with sugar only 13.7 per cent. In 1919 the United States contributed 25.9 of the imports and Germany 14 per

cent whereas Austria took 7.9 per cent and Germany 19.2 per cent of the exports. It may cause surprise that Austria should occupy the first place but she has not yet lost her ancient role of distributing centre to the Balkans. Czechoslovakia's trade balance must be judged with the greatest caution. Both in 1919 and 1920 there was a debit trade balance but in the latter year it was considerably smaller. Thus it may reasonably be assumed that a continuous improvement is taking place.

This depends also on the increasing stability of Czechoslovakia's neighbours for she found herself for some time



PICTURESQUE STRAMBERK, A TYPICAL TOWN OF MORAVIA

The small town of Stramberk, beautifully located in the hollow between Kotouž and Bila Hora, north-west of Trenčín, is a favourite resort of tourists and artists. The castle on the hilltop has long gone to ruin and its ancient chivalry is almost forgotten, but the tower, 30 feet high, locally known as the "Truba," is preserved and forms a proudly conspicuous landmark for miles around.

Czechoslovak Legation

after the Great War very much in the same position as Great Britain, with a rate of exchange comparatively so high that her neighbours could not afford to take her products. She must generally hope that her neighbours will become more affluent, although from their unhappy circumstances she will also derive some benefit.

Profiting from Neighbours' Misfortune

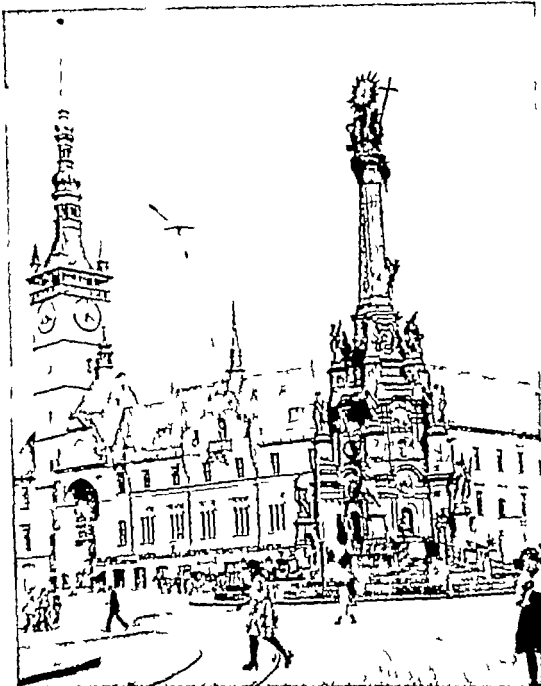
Thus the carpet-making industry where unemployment was rife a year before, was in 1923 working overtime because of the state of things in Germany, where the wages had risen to such heights, owing to the terrific increase in the cost of living, that America, Sweden and other countries who never before were in the market for Czechoslovak carpets transferred their custom to that country.

The rural conditions that prevail in Moravia are very different from those of Ruthenia. Particularly in the rich agricultural Hana region and in southern Moravia the villages often have the appearance of small towns, with electric light in all the houses, surpassing in this respect even Bohemia. When we come to the villages of southern Slovakia, where the people are quite well-to-do, there is usually more decoration and less hygiene. In house after house one finds the walls painted with charming traditional designs in several colours. Gaily wrought pottery and rows of pewter vessels stand upon the shelves, and the women of the household spend a good deal of their time in the making of intricately beautiful embroideries for their Sunday garments.

practical way the continuation of this ancient industry. When the villages take more interest, as they are being taught to do, in hygiene, the republic will be able to point with pride to the idyllic life of its Slovak peasants.

In the poorer parts and in the mountains the conditions are much more primitive, and especially is this the case in the remote homesteads of Ruthenia. Frequently the cottages consist of a single room, the greater part of which is taken up by a stove whose upper surface forms the family bedroom. The small windows may not be nailed up, as in Galicia, but serve more for the introduction of light than of air.

Moravia does not boast of many cities. Brno (Brünn), the capital, used to be called a suburb of Vienna. Lying in a delightful landscape of hills and forests, this pleasant, busy town, with many textile factories and with the fine buildings of the provincial authorities, with picturesque winding streets and with modern, tree-bordered avenues, is the home of well over 100,000 people.



Charles Jenkinson

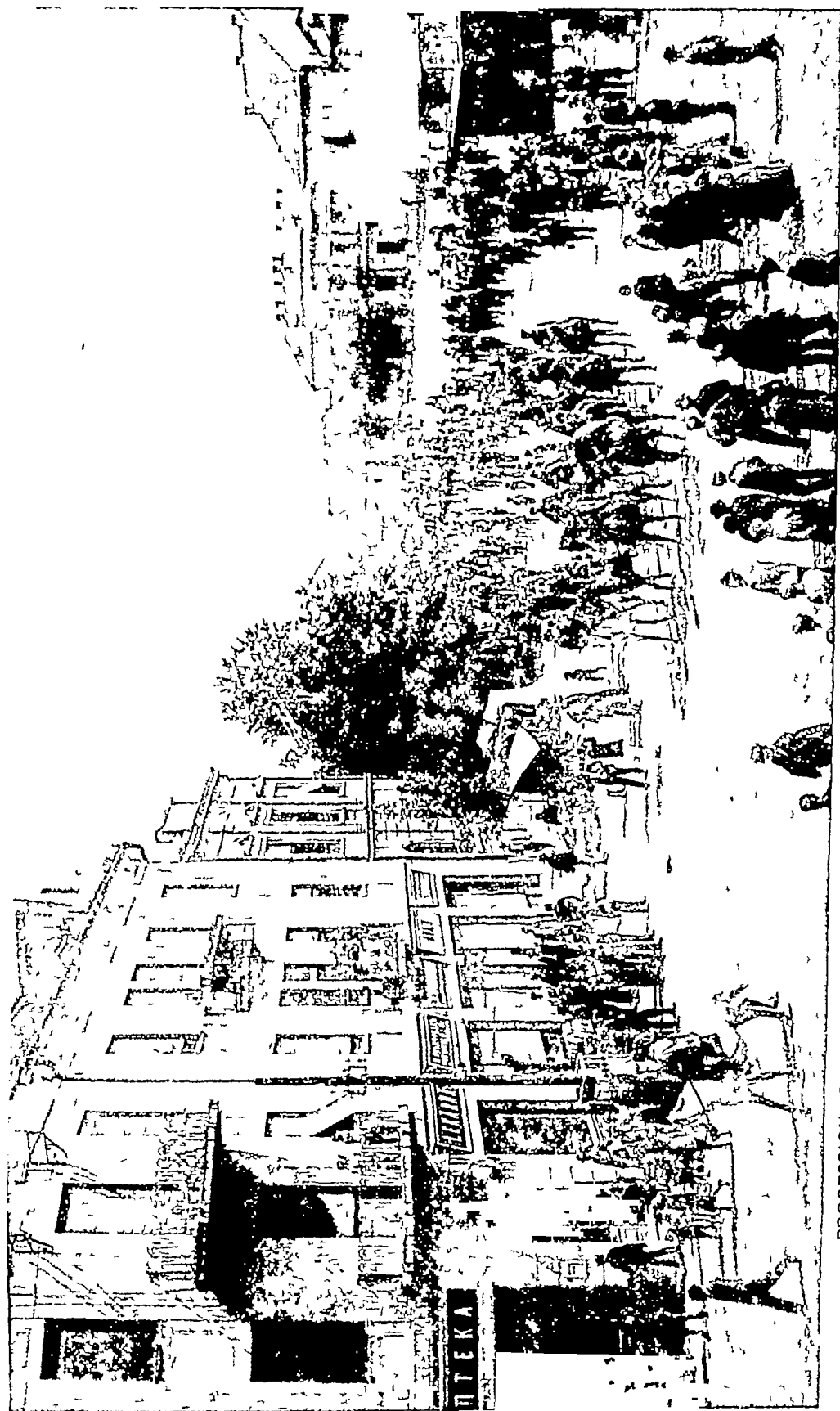
MONUMENTS OF BYGONE DAYS IN A SQUARE OF OLD OLOMOUC

Olomouc, or Olmütz, in Moravia, lies on the Morava, 41 miles north-east of Brno. A strong fortress down to 1848 the town is rich in historical variations, but time has played havoc with much of the older architecture. In the Upper Square, now known as the "White Square", stands the fifteenth-century town hall still standing and near by is the Trinity Column, an ornate structure dating from 1742.

Wenceslaus III who was assassinated here in 1306 and is interred in the cathedral. The "Trinity Column" (1742) strikes one as an appropriate embellishment for an archiepiscopal city more so than the large number of religious statues and fountains in the

towns of Bohemia where many of the population regard these gifts of the eighteenth century Habsburgs with an absolute indifference.

At Košice (Kaschan or Kassa) the administrative and cultural capital of eastern Slovakia is what was the finest



PROCESSION OF CZECHS IN A STREET OF UZHOROD, CAPITAL OF AUTONOMOUS RUTHENIA

The territory of Carpathian Ruthenia, lying at the eastern extremity of Czechoslovakia, was added to the republic as an autonomous area by the Treaty of St. Germain in 1919. It is rich in varied natural resources and contains about half a million inhabitants, consisting mainly of Little Russians or Ruthenians, though Jews form the bulk of the inhabitants in the towns. Its chief towns are Uzhorod, or Ungvar, and Mukachevo, or Munkacz. The former, erstwhile capital of the Hungarian county of Ung, lies on the Ung, a small tributary of the river Bodrog 80 miles north west of Debreczen, and has a noted pottery industry.

Gothic church of Hungary for the cathedral with its polygonal choir and the magnificent open-work canopy reminiscent of the exploits of the Nuremberg masters is a much more remarkable church than any in Budapest. Kosice is an ancient royal free town with some 40,000 inhabitants. It consists of a regularly built inner town formerly a fortress and three suburbs.

Ruthenia's capital Uzhhorod has been altered nearly out of recognition since the Great War. What was at that time a rather dirty, struggling place under a proud Greek-Catholic cathedral and a seminary situated on the hilltop, is becoming a city on a little town of a phantasmagoric streets and Bohemian hope for the Czech authorities have been followed by commercial people of their own race and the Ruthenians and Jews the pre-war inhabitants are having their eyes opened. There as in other towns of Ruthenia the Czechs are doing all that is possible for the advancement of their hitherto neglected Slav brethren. Uzhhorod for instance being the headquarters of a Ruthenian theatrical troupe which subsidised by the government travel from place to place and is assisting to civilize the native.

CZECHOSLOVAKIA GEOGRAPHICAL SUMMARY

Natural Divisions. West Bohemia (q.v.) middle Moravia a passage way the Moravian Gate between the old pre-Alpine Bohemia and the younger Tertiary Carpathians the upper valley of the Morava draining to the Danube and the headwaters of the Oder draining to the Baltic east Carpathian hill-country between the summit of the West and East Beskids the High Tatras and the Forest Carpathians and the Alföld the great plain of Hungary. Moravia lies between the uplands of Jihlava and the Little Carpathians.

Climate and Vegetation. Transitional climate between the oceanic type of Western Europe and the continental type of Russia (cf. Poland). Bohemia is more oceanic, Ruthenia is more continental. Throughout the country the elevation of most of the surface intensifies the cold of winter and modifies the blare of summer heat. The uplands are forested, and the valley floors of ancient date and well filled with alluvium, are cultivated when the floods permit.

In Moravia and Silesia the condition of public health is at least as good as the average of Western Europe but in Slovakia and especially in Ruthenia much remains to be done. By verbal instruction and by means of numerous booklets the people are receiving belated knowledge of how to care for themselves. For example it has hitherto been the practice in Ruthenia for a woman to take a gulp of strong alcohol after giving birth to a child, and to pour a little of it down the child's throat. Where the Sokol (the famous gymnastic and cultural society) of the Czechs has established itself there the physique of the people is naturally improved. The Moravians are nearly all members of a Sokol and in Slovakia the system is making good progress. Fundamentally these Slavs are fair. And as for the influence upon them of their environment it is a fact that in the most fertile parts of Moravia the prosperous Hanaks remind one of the Dutch for if they are slow they are resolute. The Slovaks on the other hand, particularly those who dwell among the foothills of the Carpathians, are of a more fiery as they are very often of a more religious nature.

Products. For coal see Bohemia and Silesia. Oil and salt occur in relation to the Carpathians (cf. Poland i.e. Galicia and Rumania). Moravia grows the most cereals on both sides of the Little Carpathian sugar belt cover extensive areas. Brno is a great centre for woollens.

Communications. Until the process now in hand, of improving the railway routes from west to east the railways are dominated by the neighbouring great commercial cities Berlin Vienna Budapest Warsaw Bratislava (Pressburg) is the centre for Danube traffic and the rivers awaiting canal connections, like the railways lead by the shortest routes across the frontiers to foreign capitals.

Outlook. The Czech mission to improve the commercial value of the country's products and the standard of life of the people which both decrease in importance with increasing distance east of Prague promises that Czechoslovakia will become a farming and industrial country with better agriculture than Austria and greater industries than Hungary or Poland.



WHERE THE PLAIN BREAKS OUT IN CUPOLAS AND MINARETS OF DAMASCUS, THE OLDEST LIVING CITY
The city of Damascus, the oldest living city in the world, is situated in the heart of the Syrian desert, where the plain breaks out in cupolas and minarets of Damascus, the oldest living city in the world. The city is situated in the heart of the Syrian desert, where the plain breaks out in cupolas and minarets of Damascus, the oldest living city in the world. The city is situated in the heart of the Syrian desert, where the plain breaks out in cupolas and minarets of Damascus, the oldest living city in the world.

DAMASCUS

Changeless City of the Syrian Plain

by Richard Curle

Author of "Into the East"

DAMASCUS is one of those cities which burst suddenly upon the view. You approach it through the narrow winding stony valley following the course of the famous Barada (the Abana of the Old Testament) and there is scarcely a hint of its nearness until all at once the valley ends and the great town unannounced by its orchard lies shining before you.

Historically the oldest of all living cities Damascus still retains an almost undiluted flavour of the Orient. In the crowded closeness of its narrow street and covered bazaars there mingle and pass all the types of the Near East. Caravans with tobacco from Bagdad and with silk carpets from Persia, dark-hued Arabs with camellia turbans from Yemen pilgrims hastening toward Mecca—many Mahomedans make Damascus the real starting point of their journey to Mecca—furtive Eastern Jews, Levantine Christians of primitive faith, bearded Syrian merchants in their lambswool coats, sellers of roasted beans or fresh water, whose raucous cries are heard above the ceaseless chatter of the bazaars and the confused rattle of the streets, all these and many more give to the whole city an Oriental pageantry and colour.

Easily Swayed Crowds of Damascus

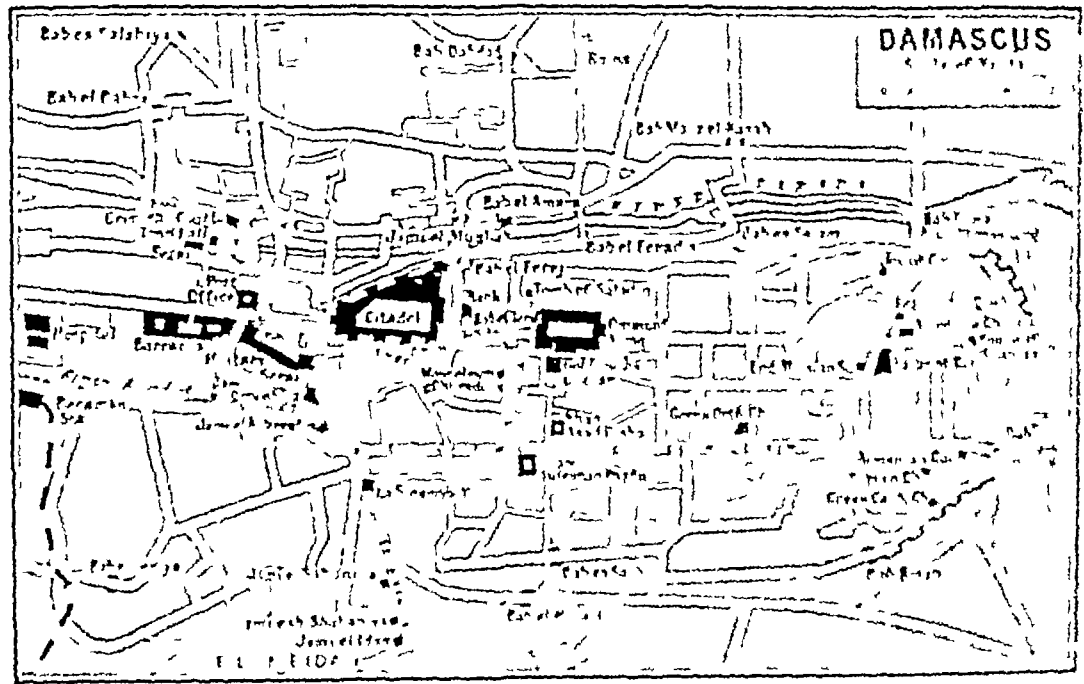
The Damascus crowd is intensely excitable. I have witnessed a huge throng of men swayed hither and thither like leaves by a chance orator or a chance rumour, assemble all at once before the governor's palace to protest against the excessive price of bread. Such moods are dangerous while they last, but they die out as quickly as they rise and the mask of Oriental fatalism

and acceptance will cover again in a moment the gesticulating mob whose menacing cries and high rate of hub would make me think that a serious riot was about to break forth. In the last long suffering has indeed become a second nature and the very fanatics, praying in the mosques or on dusty sandhills under the glare of the sun have a look of total resignation with regard to the evil of this world.

The Bath and Eating House

There is no longer active ill-treatment of the Christian or the Jew, but on those proud Moslem faces I have seen expression of contempt and hatred withering in their completeness. There are it is true places in Damascus into which it is not safe for the stranger to stray but peaking generally the worst that one need expect now is to be hustled or cursed at. You may even enter the Omniad Mosque itself as I have entered it provided that you remove your shoes. As for the Turkish baths for which Damascus like many an Oriental city is famous and on which some of its finest decoration has been expended an infidel may enjoy their delights as freely as a Mahomedan. Similarly in the eating houses in whose dim recesses dishes of mutton cunningly disguised and sweetmeats all frothy and sickly sugared may be devoured with a gusto which if not entirely gastronomic, is at least created by the spell of novelty. And the merchants however pious they be are only too willing to sell to an unbeliever and well I may add at an exorbitant price.

It would not however be safe to try to purchase one of those illuminated korans on which one cannot but cast





DAMASCUS The huge mosque of Ummiad almost burnt down in 1803 decays slowly a patchwork of colours in the Syrian sun

1573



Donald McLeish

DAMASCUS *In the vivid bustle of the cloth bazaar there is always a crowd examining the bright clothes displayed there for sale*



DAMASCUS *Derb el Mustakim* the street which is called straight runs almost the length of the town and terminates at the East Gate



Georg Haeckel

DAMASCUS The scourge of Damascus has been fire, and surprisingly few antiquities are left. A fire destroyed the roof of this bazaar

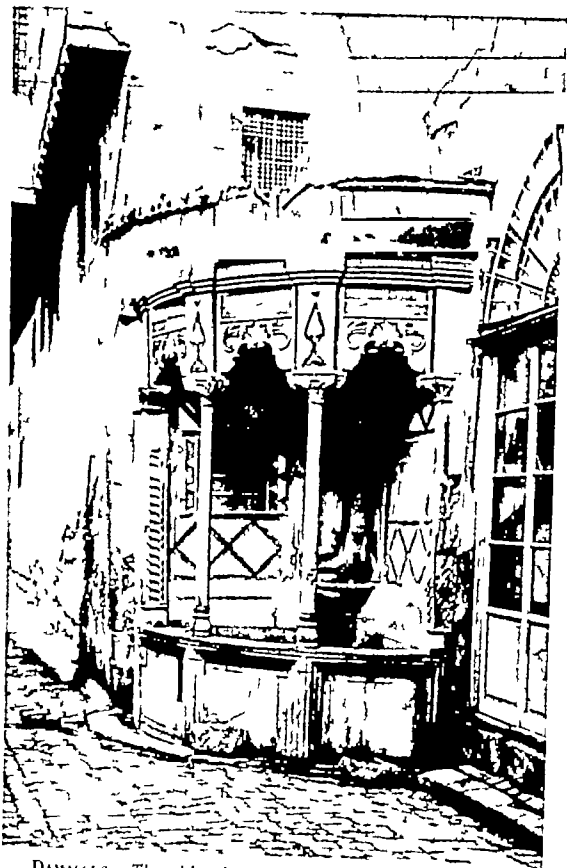
1576



DAMASCUS The Khan Isad Pasha is the finest of the khans with its pillars of black and yellow marble. Round the court are rows of shops.



DAMASCUS *In the Ommiad courtyard is the Kubbet el-Khazneh, "dome of the treasure," with its borrowed Corinthian columns*

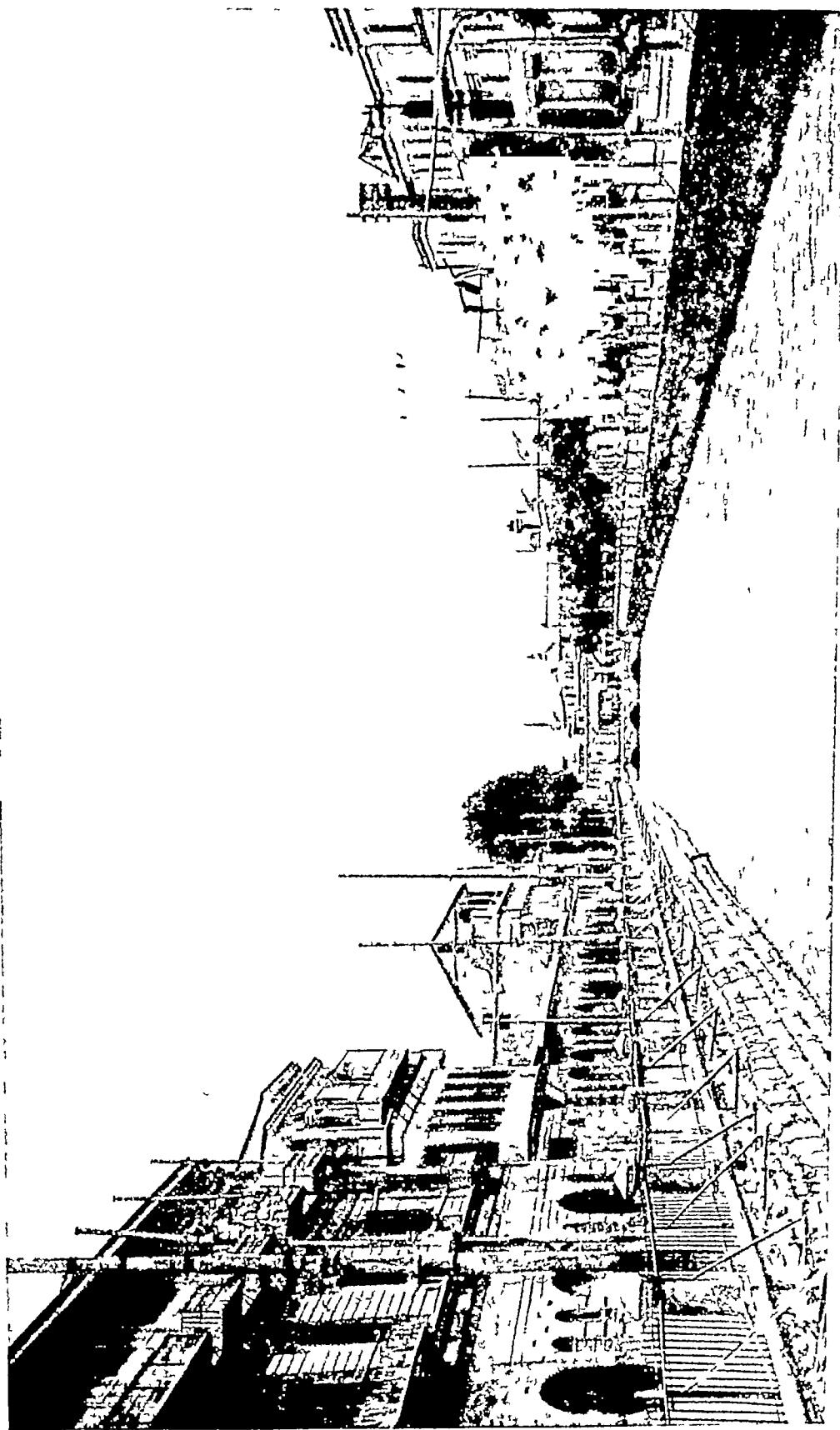


DAMASCUS This dilapidated but still beautiful marble canopy protects a spring. The city water comes mainly from Bara la



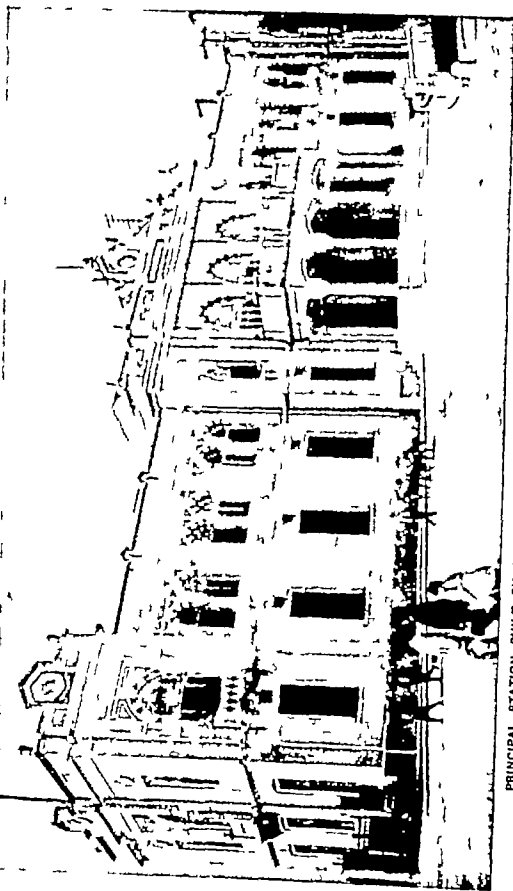
DAMASCUS Near the Bab el Amara, one of the two northern gates of the Ommiad mosque, stands the ruined tomb of the great Saladin

1580



MODERN HOUSES UPON AN AGE-OLD SITE A CONDUIT THAT TAKES THE BARADA THROUGH THE TOWN

Nahr Barida, the cold stream, has been much sung by Arabian poets, and the Greeks named it Chrysorroas, or the golden brook. The Arabian concept of Paradise is naturally of an antithesis of their normal surroundings, and they picture an orchard through which go streams of running water. Damascus, with its comparatively well watered plain and groves of fruit trees, comes near to realizing this ideal. The people depend very largely for their water on this stream, but owing to the foundations of the town being mainly built over rubbish, the drinking supply is often unhealthy after a dry summer



PRINCIPAL STATION BUILT BY GERMAN ENTERPRISE AND A DEPARTURE POINT FOR PILGRIMS

PRINCIPAL STATION BUILT BY GERMAN ENTERPRISE AND A DEPARTURE POINT FOR PILGRIMS

four-square amid its teeming orchards To walk through these orchards, to escape into them out of the glare and the acrid smells, is like walking into a green twilight, full of delicious odours and the song of birds. Gardeners dressed in flowing white, like priests performing ceremonial duties, appear and disappear among the trees. A deep silence, made only deeper by the sounds of nature, encompasses these orchards, which seem to stretch interminably around one.

One walks and walks as in some magic garden, and even here, in the new blossoming of the spring, there is the feeling of an aged world and of something changeless and Asiatic. The chill of the coming night falls softly as the dusk filters through the trees and far off in the city you hear, faint and clear, the high-pitched cry of the muezzins from the mosques calling the faithful to prayer. As one man all the gardeners throw themselves upon their knees and, with their faces turned towards the holy

city in Arabia, recite the prayer of evening. Thus one's feeling that they are priests has, as it were, a visual confirmation at the decline of day.

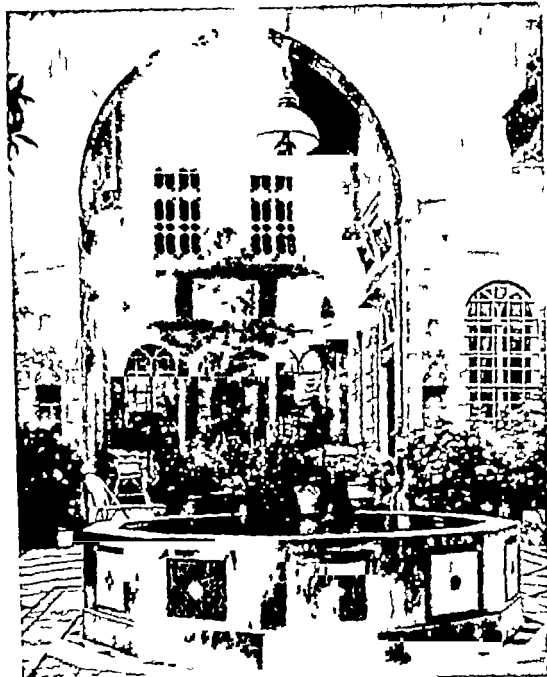
Although Damascus is so decidedly a town of Mahomedans, there are nevertheless large Christian and Jewish quarters whose inhabitants, living in the most tortuous of narrow streets, resemble frightened rabbits in their nervous humility and their anxiety not to offend. But they cling to their faiths with an age-old tenacity, and some of them are people of considerable worldly substance. It is curious to think that the finest example of an ancient Damascene house is in the possession of a family of Jews, but then it must be remembered that Mahomedans have none of our Western craving for the preservation of famous buildings or for archaeological research.

Even the great Ommiad Mosque, one of the most celebrated of all Mahomedan mosques, is but a motley of old and



E. N. A.

GATEWAY OF GRECO-ROMAN DAYS BY THE FAMOUS OCTAGONAL MINARET
 Damascus became a provincial city of the Roman Empire in A.D. 150 in the time of Trajan. The town was later included in the Byzantine Empire, and when the Arabs under Khalid ibn Walid, stormed it in 635 it was a Byzantine garrison that they encountered. This gateway beside the beautiful minaret of the Ommiad Mosque serves for memorial of the victory in 1540.



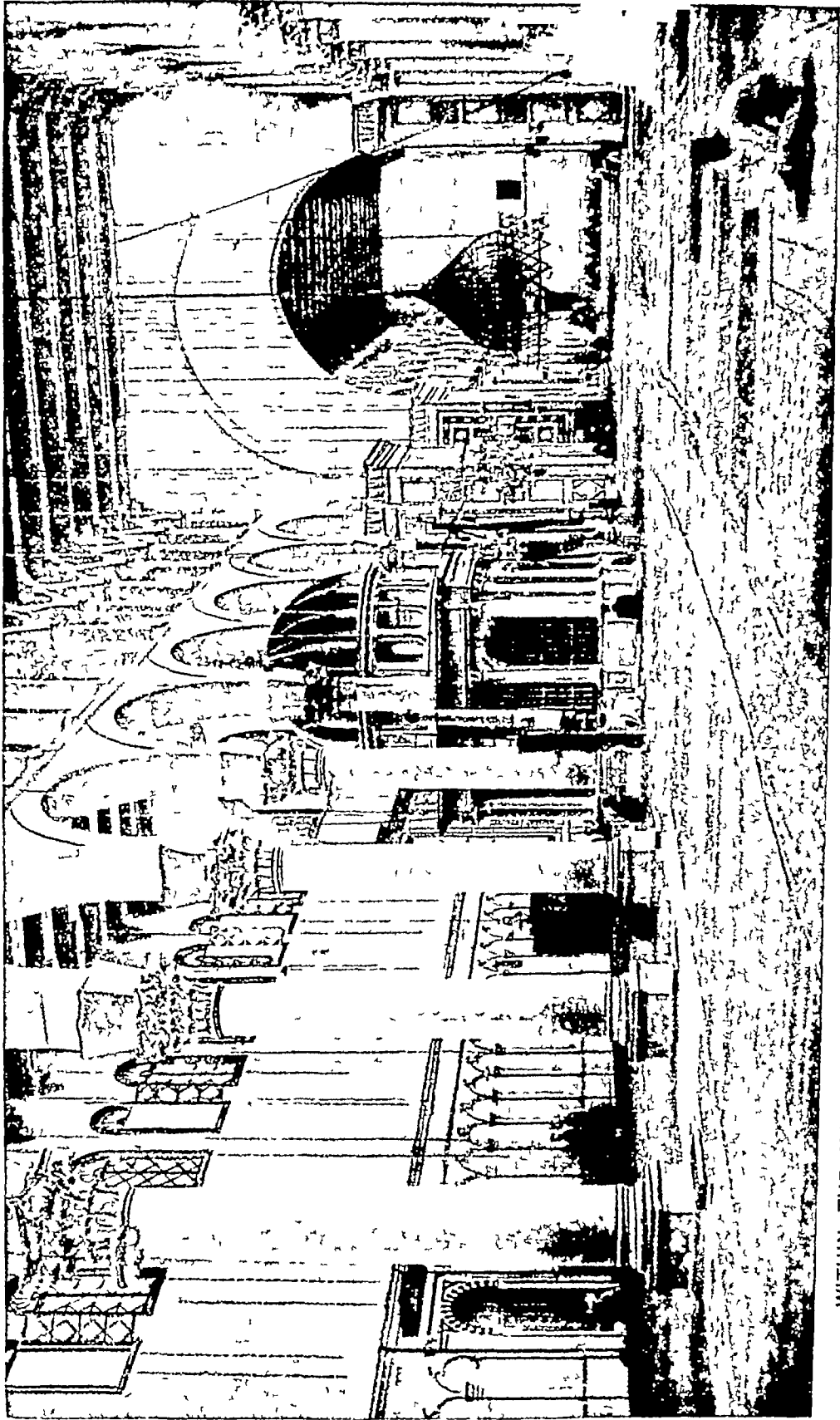
Donald H. Lewis

LUXURY MOORISH AND MODERN IN THE HOME OF A DAMASCENE

Damascus has ever been celebrated for the luxury of its wealthier homes. And this effort of magnificence is the more striking in that there is often little heat of it out side. One comes from the sultry and odorous street where the life blimmers in the best into a hall fragrant with flowers and cool with running water. Above all, the contrast of light from the Koran and electric light

new. Much of the original building was burnt down at the close of the nineteenth century and though its structure 500 feet long and 350 feet broad at the widest is impressive and of noble proportions, yet it wears that rather garish look which inevitably char-

acterises patchwork architecture. Its history goes back to long before the era of Mahomet. It was originally a Roman temple. It was then a Christian church and now for 1300 years it has been a Moslem sanctuary. Such facts show the hoary antiquity of Damascus.



Georg Haeckel

WITHIN THE MOSQUE OF OMMIAD BUILT BY GREEK CRAFTSMEN AND PRAISED THROUGH ALL ISLAM

It is said that 1,200 craftsmen were fetched from Constantinople for the achieving of this masterpiece in marble and mosaic, and that Syria was ransacked for beautiful columns to deck it. Vast sums were spent in constructing it, the ceiling, of wood, was inlaid with gold and from it depended no less than 6,000 golden lamps. But in 1069 much of this magnificence was destroyed by fire and in 1893 it again suffered, and although restoration work was carried out on the original plan the building as it is now but serves to suggest its former wealth. In yet earlier days the site had been occupied by a Roman temple

And while I am speaking of buildings let me mention the marble court yards backed maybe by a green tiled minaret standing against the sky and with a fountain playing in the midst of orange and lemon trees planted in the tessellated floor of which one may sometimes catch a sight through a suddenly-opened door leading on to the footpath of a busy street. These occasional glimpses of an Orient unk in repose and calm living untroubled beside the seething battle of the street are at once refreshing and mysterious. They seem to suggest that Eastern tranquillity and aloofness that love of the beautiful and the serene which one feels through all the outward turmoil of the East.

The pariah dogs of Damascus litter the streets in incredible numbers. Estimates put them at 30,000 and they live one and all on chance refuse or scanty charity and, indeed, on anything they can pick up. They dwell in colonies—sometimes there will be several different colonies in one street—and the dogs of one colony will never allow the dogs of another colony to approach too close.

Pariahs Tolerated of the Damascene

Frequently of an evening I used to go to a nearby baker's shop and arming myself with a handful of flat Arabi loaves wander about the streets and feed these half-starved yellow curs. Several of the local colonies got to know me quite well but I am afraid that their affectionate greetings were entirely prompted by the state of their appetite. In truth I should imagine that those dogs—which of course are unclean animals to Mahomedans and of which no Moslem would dream of making a pet—are quite incapable of the loyal affection to a master displayed by European breeds. Long centuries of living by their own exertions must at least have given them a strong independence of spirit. They were lazy but care-free—they passed their days basking in the sun and their evenings

prowl for food. They were tolerated not only because they were excellent scavengers—outside the wall I have seen many a dog eating up the remains of dead camel—but because oddly enough the inhabitants of Damascus evinced a kind of generic sympathy apart from personal affection for them. They were part of the city and a Mahomedan when ill would frequently order bread to be distributed among them as such acts of charity are held to be meritorious. To me they remain as part of my picture of Damascus and I cannot walk about its streets in imagination without picking my way carefully through the various colonies.

Trams and Cinema: A Strange Setting

Of all towns in the world there is probably none in which the wonders of progress appear more incongruous than in Damascus. The railway fortunately skirts rather than enters the city and even the electric tramway—a repulsive anachronism in such surroundings—does not seem to pierce the city proper. But I have sat out a cinema performance in Damascus and nothing could be more hopelessly out of place than to watch a body of fierce Arabs and fanatical Syrians gazing at the trivial episodes of a French comedy. I wish the East did not take so readily even though it is only the surface of life that is scratched to Western innovations. An up-to-date Damascus would verily be a hideous contradiction in terms; you might as well rewrite Shakespeare in the slang of Broadway. It is the very feeling of changelessness that gives to Damascus the harmony of the immemorial Orient.

Shoddy Workmanship of To-day

It must be admitted that so far as artistic performance is concerned the people of Damascus lag behind. The Damascene work of which we hear so much is crude and garish as carried on to-day. Once perhaps their goldsmiths and coppersmiths were great masters but now they are merely conventional



R N A

ROOFED BAZAAR IN THE STREET WHICH IS CALLED STRAIGHT

This portion of Derbel Mustakim is known as the Long Bazaar, and has altered substantially, unlike other parts, since the days of Ananias, who is said by the legend to have named it. Once it possessed a colonnade, and some of the columns may still be seen incorporated in the houses. Midhat Pasha, one of the most enlightened men who ever ruled Syria, had the street widened for a carriage road.



Georg Haeckel

CAMEL LOADS OF FIREWOOD FOR A DAMASCUS HOME

Firewood is somewhat scarce round about the city, and the collecting of it is apt to be a protracted and wearisome business. Here a collection of logs and faggots is being taken into a building that might have been erected in Bible times, but that yet carries the insulators and wire of a telegraph line. The details of local house construction can be seen, and reveal undressed logs under crumbling plaster.

workmen with ideas of taste and originality that would shock a Birmingham Jeweller. They are fond of producing tables inlaid with mother-of-pearl, camel bone and various woods, but I am surprised that anyone could be induced to buy such tables. The same inartistic consciousness causes them to replace their crumbling buildings by Western models of utilitarian ugliness. As Damascus is gradually rebuilt so will it gradually lose the unique character of its aged and beautiful picturesqueness. Its inhabitants will be quite unaware of what they have lost, wrapped in their religious fervour they have no eyes to see.

The finest things produced in Damascus—usually on looms of a primitive nature—are the silk, cotton and woollen stuffs. Some of these it must be admitted, are of lovely texture and design, mainly of a traditional character, and a visit to the shops has led many a person to spend much more

than was intended. It is by these humble manufactures that Damascus really preserves some right to speak of itself as an artistic centre. But the workmen in the various trades, full of an almost fatuous self-complacency, are formed into guilds which know very well how to keep up their own importance.

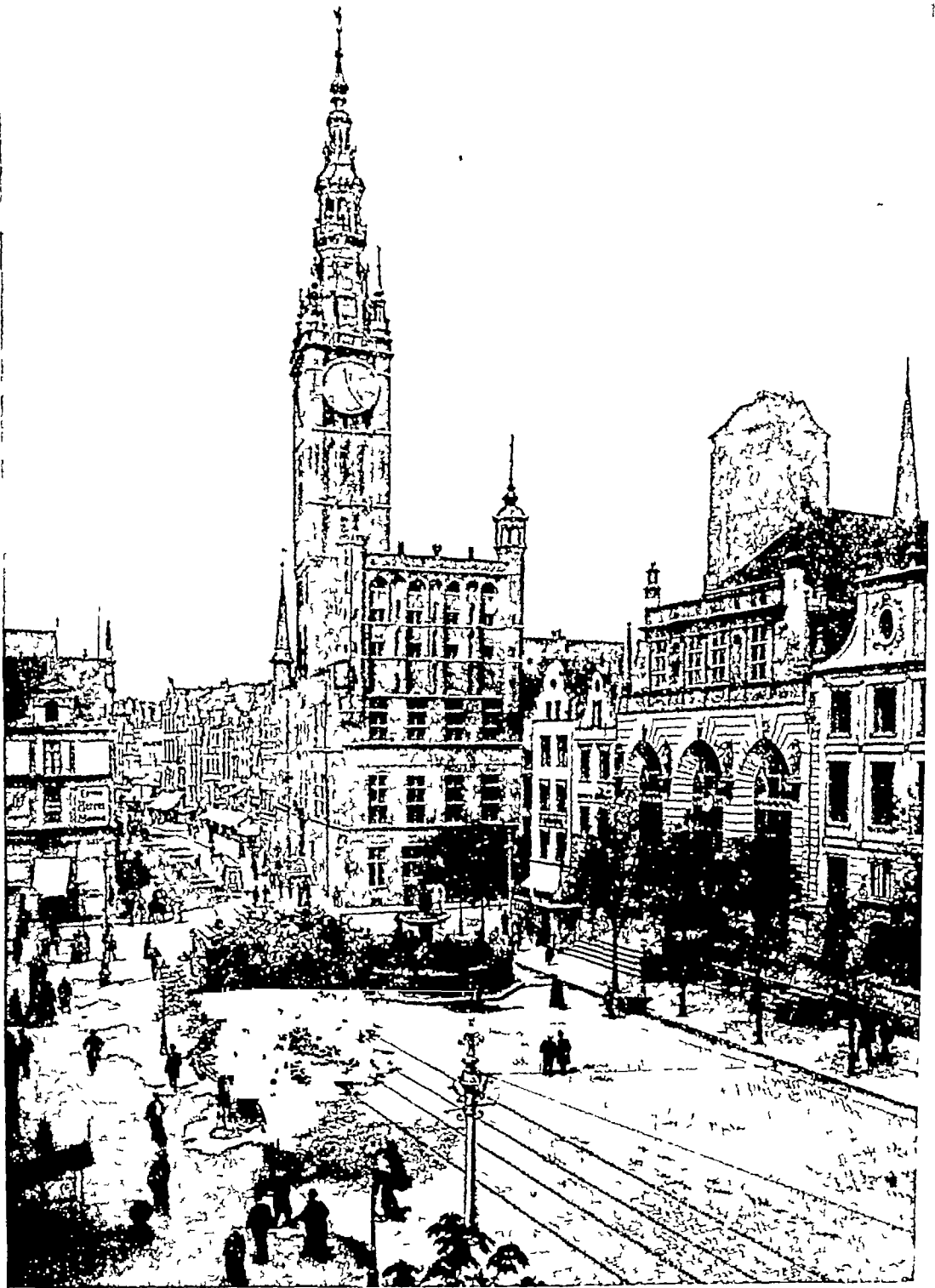
The most favourable period of the year for a visit to Damascus is in the early spring when the almond and apricot blossom lies thick upon the orchards and when the wild flowers of Syria are at their fairest. Yet those glorious days of hot sunshine close with a treacherous chill and the nights are often very cold. But that surely is not a drawback which need deter a careful traveller and the warm beauty of the day, especially in the shelter of the shaded orchards, far outweighs the latter coldness of an occasional night. It is truly a town of extremes in climate, but after all Damascus is in the East and the East is the land of extremes.



BEAUTIFUL MOSQUE OF DERVISHIYA TWO HUNDRED YEARS OLD

Georg Macdonald

By the corner of this mosque, which stands at the end of the Suk el Kharratin, is a fine example of decorative Moorish work in the shape of a fountain. Its arch can be seen above, and the fine faience work executed in blue marble has a telling effect among the rather drab buildings around it. Farther up the street the walker has the rare benefit of the refreshing shade of some plane trees.



Georg Haackel

FAMOUS BUILDINGS IN ONE OF DANZIG'S MAIN ARTERIES

Not least of Danzig's fine old buildings is the Rathaus, or town hall, standing at the corner where Long Street expands into Long Market. A Gothic building, with a slender spire crowned tower 270 feet high, it was first erected in the fourteenth century, but remodelled in the sixteenth century. To the right is seen the fifteenth century Junkers' Hall, with S. Mary's Church tower rising behind.

DANZIG

The Independent City-State

by W. H. Dawson

Author of "The Evolution of Modern Germany"

THE city of Danzig, situated near the bay of that name at the eastern end of the Baltic is one of the old Hanseatic cities and has been immemorially an entrepot for the trade between Northern Russia and Germany. It lies on the left bank of the western arm of the river Vistula, locally known as the Danzig Vistula, and about five miles from the coast while the territory of which it is the capital separates East Prussia from the Polish Corridor.

Like Hamburg, the town is intersected by the waters of a tributary of the main stream, here the Motlau, which enters from the south and east after long meanderings from the Werder Land where it rises, while another tributary, the Kadane, issuing from the romantic Radaune Valley, flows through some of the western suburbs of the town. The Motlau in particular has been put to the best possible practical use by the construction on its banks of docks and quays, with the result that vessels of considerable size are able to load and unload in the very centre of the town. The town was formerly approached from the river by a series of water gates which the civic authorities took care to close at nightfall.

Shipping, Banking and Other Industries

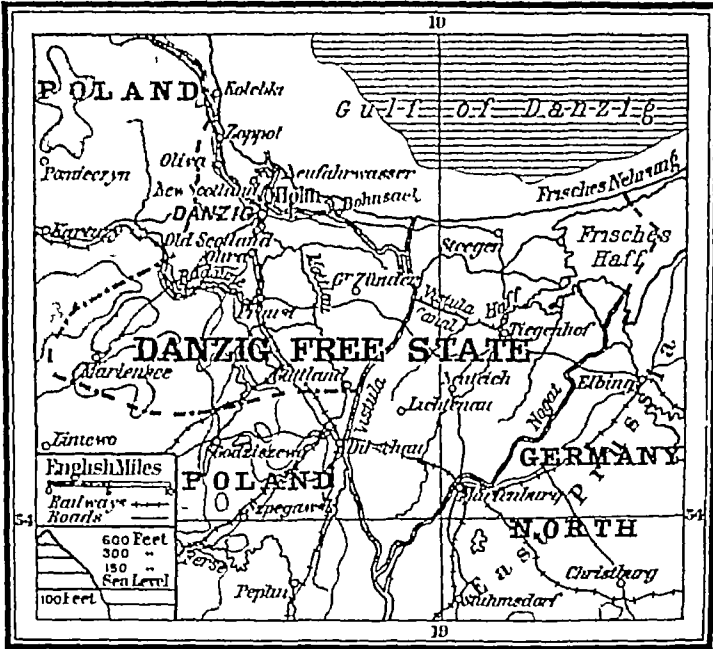
The principal port, however, is at Neufahrwasser, lying at the mouth of the Vistula. This harbour, with the adjoining canal over 2,000 yards long, was constructed by the municipality at great expense in the middle of the nineteenth century when the old embouchure of the Vistula had been silted up, making it impossible for any but light craft to enter the river. There is a railway as well as river communication between the port and the town.

Danzig has a many-sided industry besides its great shipping trade. The shipbuilding yard at one time had a steady output of vessels of war and mercantile vessels are still largely built here, there is also important marine and other engineering work, locomotive and wagon work, chemical glass, wire, paper, machinery, naval armaments and other factories. Arms and ammunition used to be made on a large scale, but this branch of manufacture has for obvious reasons declined. The banking trade of Danzig, a connecting link between Germany, Russia and Poland, has long been considerable and it is likely to be larger in the future.

The History of the Hanseatic Town

The town had gained a position of relative importance and prosperity early in the Middle Ages and midway in the fourteenth century it became a leading member of the Hanse. It obtained most of the attributes of a free city in the following century, subject to the suzerainty of the king of Poland, whose protection it had invited. Its political rights were tenaciously guarded at times by arms, and were only lost in 1793 when, on the second partition of Poland, the town was incorporated in Prussia. During the French wars at the beginning of the nineteenth century Danzig was for a time a free city under a French governor but in 1814 it returned to Prussia, of which it remained a part until 1919, being the administrative capital of the province of West Prussia.

By the Treaty of Versailles the town with its adjacent territory was reconstituted a free state under the protection of the League of Nations, subject to certain privileges and franchises conceded to

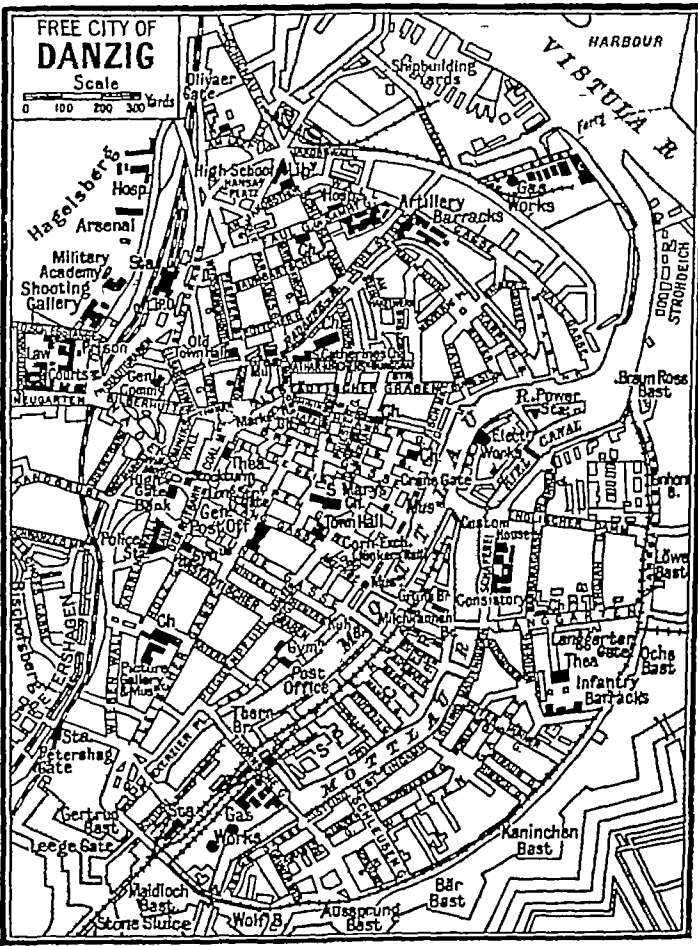


FREE TERRITORY ATTACHED TO DANZIG

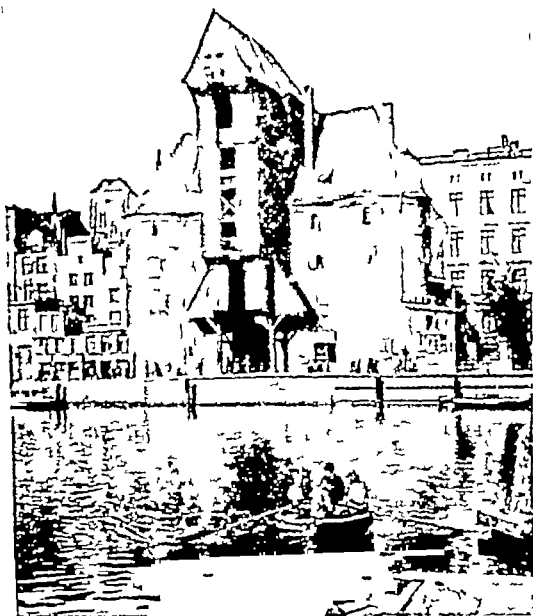
and cut off from any close contact with the main streams of Continental life, Danzig has preserved its individuality in a remarkable manner. All sorts of peculiarities, large and small, mark it out as a city apart from other German cities, though it yields to none in its strong national spirit. Most medieval German towns fall into two main divisions, the Old and the New Town, but Danzig has five. There is no building stone in the neighbourhood, with the result that the town is almost altogether brick-built and

Poland During the discussions the Poles made desperate but unsuccessful attempts to include the port, with much other territory to which they had no claim, within their new state. In point of fact, the Poles form an insignificant handful of the inhabitants, insomuch that at the elections to the Danzig Parliament in November, 1923, they were only able to poll 4,600 out of a total of 165,000 votes cast and to gain five seats out of a total of 120. Happily for the city and its population the new order has been fairly regularised, the Poles knowing exactly the limits of their rights and the governing authorities of Danzig showing every desire to live on peaceable terms with a new yet very old neighbour.

Isolated in the distant north-east of Germany,



STREET PLAN OF THE WATER-GUARDED CITY



Georg Harber

ONE OF OLD DANZIG'S MANY MEDIEVAL TREASURES

The Motława, tributary of the Vistula, flowing through Danzig in two branches and separating the older portions of the city from the modern quarters has good accommodation, and many fair-sized vessels load and unload at the docks constructed on its banks. A notable landmark on its left bank is known for its Crane Gate—a quaint medieval structure dating back to the fifteenth century.

red-roofed. Again, Danzig does not speak of streets (strassen) but of gaszen, a word usually connoting in western and southern Germany thoroughfares of a second or third-rate kind and its place nomenclature abounds in local oddities. There is also a Danzig dialect. It is not particularly melodious and its slovenly contractions like those of the

Bavarian dialect, are an abomination, but it has a homeliness and local colour which attract even inhabitants who would never think of using it.

No old German town is more distinctive and none has preserved its medieval style of architecture more faithfully than Danzig. There are four or five principal entrance gates, with a host of water gates opening on the river and its

connexions The most notable of the town gates is the High Gate near Lang Gasse (Long Street), leading to the Long Market, a sixteenth century structure built in the style of a Roman triumphal arch

Civic Architecture in the Older Streets

The centre of the town is a maze of quaint, narrow, winding and often cobbled streets and alleys, sometimes communicating by arches and often ending with a water gate at the river bank They make a spectacle delightful for the stranger to look upon, but they are the reverse of helpful to the traffic of a population of nearly 200,000 Many of these streets are full of picturesque old houses, exquisite in form, decoration and colour, with handsome façades, tall pointed gables, often beautifully ornamented, and high-pitched roofs of red tile The fronts of the stately patrician houses in particular are lavishly ornamented, their gables surmounted by stone figures—a griffin, a goblin, a monkey and so forth

A peculiarity of such houses is the veranda on the ground floor, facing the street and approached by a short flight of steps Unlike the house itself the veranda is invariably of stone, and the front of the containing walls is usually carved Where the steps have railings the lower ends of these often rest on huge stone balls or other ornamental masonry, and the railings themselves are fine specimens of antique iron and brass work Convenience of traffic has led to the removal of many of these verandas, to the advantage of the basement rooms behind them, but they are still found in all the old streets

Resort of English and Scottish Traders

In past generations there was a close relationship between Great Britain and Danzig, leading to a continuous exchange of emigrants Hence it is that, just as there are present-day Danzigers with names which unmistakably betoken their English or Scottish origin so there are in Great Britain many nationalised

families of German descent who came from the Baltic port early in the nineteenth century or before Various memorials of this international intercourse survive in Danzig There is an English Road, two of the suburbs still bear the names Old Scotland and New Scotland, and one of the architectural gems of the city is the beautiful old English House, which is supposed to have served as meeting-place and warehouse for the old-time English traders with the town It is a wonderful structure, so high that it dominates the little street in which it stands, for it rises many storeys, ending in a high-pitched gable, surmounted by a tower and spire A steep flight of steps leads to a spacious veranda, and the façade, with its serried rows of windows, is one of the most striking in the city

Centre of Fine Ancestral Mansions

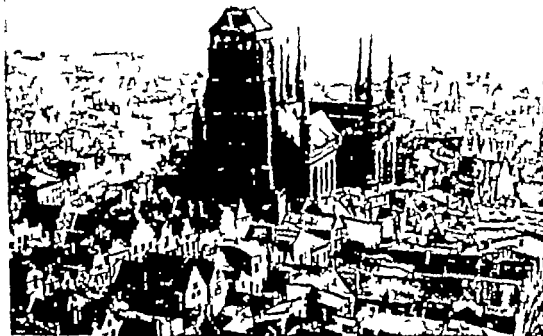
Another old house of exceptional beauty, located in the Long Market, is the Steffens House, the ancestral home of the family of that name It is in the late Renaissance style, rich yet chaste in ornament, without the excess into which the style was apt to fall in Germany As in the case of typical old Danzig houses in general, the front is narrow, but it rises to a height of four lofty storeys, and there is the normal veranda, with basement behind True to type, the façade is a mass of windows, while rising in front of the high-pitched roof is a stone gallery surmounted by four full-length figures

The finest parts of old Danzig are Lang Gasse, already named, and the Long Market, running to the river Mottlau, both of which abound in typical buildings of great beauty Lang Gasse is the principal business street, though it used to be the favourite residential quarter before prospering citizens began to build villas on the periphery The ground floors of many of the old houses have been converted into shops but the upper stories retain their olden glory The so-called Old House is specially interesting



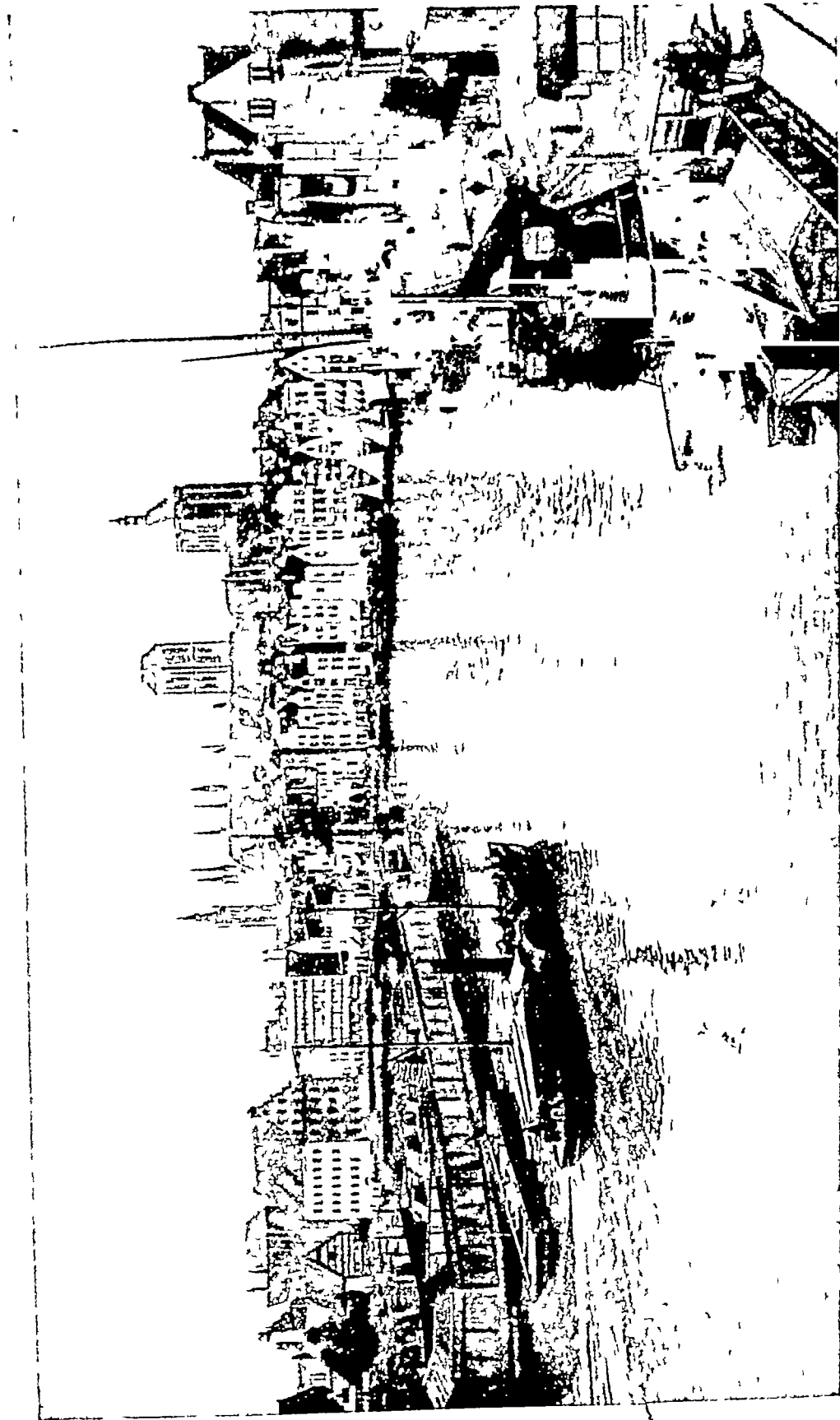
AIR IMPRESSION OF THE SOUTHERN DEFENCES OF DANZIG

Here we were aware of the fact that the deep water of the V-shaped part of the southern defense of the city is the main point of the city's defense. The city's main point of defense is the V-shaped part of the city's defense. The city's main point of defense is the V-shaped part of the city's defense.



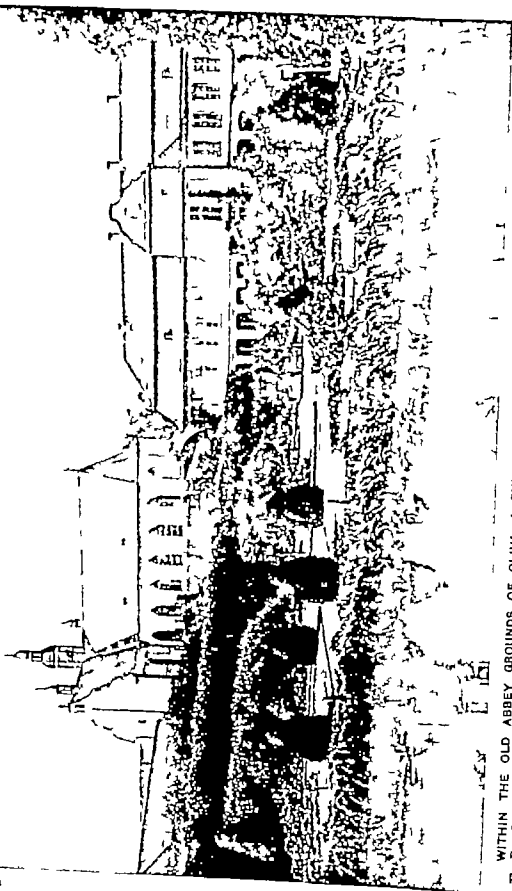
DANZIG'S BEAUTIFUL AND LOFTY SANCTUARY OF S. MARY

In the preservation of its medieval characteristics Danzig has spared no pains. The appearance of many of the houses with narrow, lofty and highly decorated gable-façades attracts the eye. The finest church in the city is St. Mary's Church, built between 1343 and 1362, whose ten slender towers and spiral 217-foot tower soar high above the more modest structures in the surrounding street.



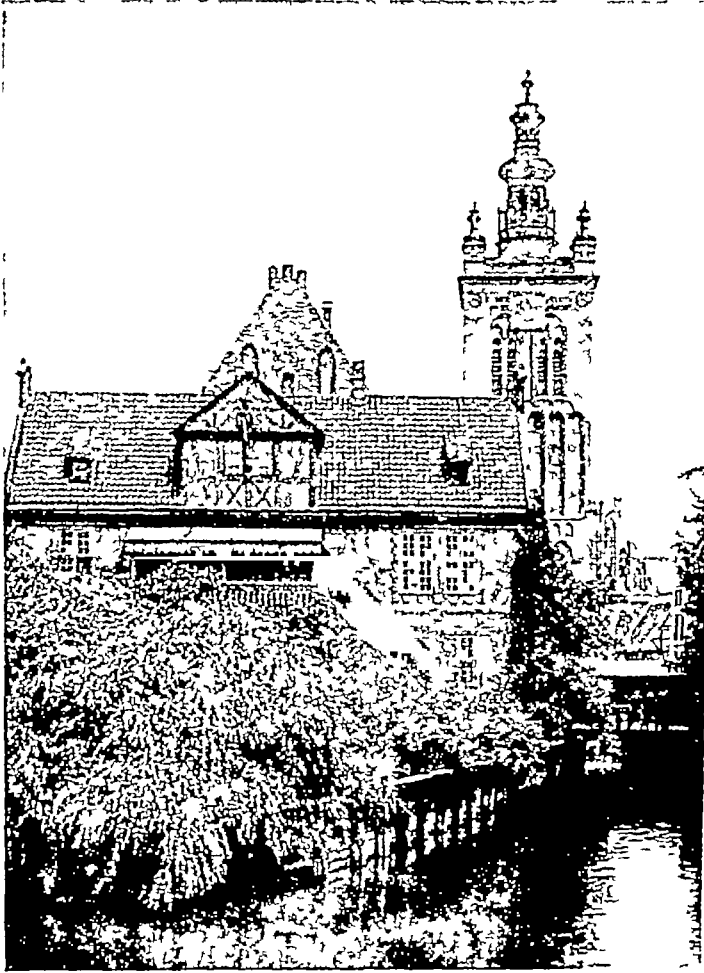
George Haeckel

FREIGHT BOATS ON THE MOTT LAU RIVER IN THE FREE CITY OF DANZIG, LONG-FAMED SEAPORT OF THE BALTIC
Danzig is situated on the western arm of the Vistula, some five miles from its mouth in the Baltic. A former possession of Germany, the city, together with the adjacent territory, was created a free state under the protection of the League of Nations in November, 1920, according to Article 102 of the Treaty of Versailles. As a leading member of the Hanseatic League, Danzig acquired much prosperity in medieval times, under the protection of the Polish kings it enjoyed all the privileges of a free city, and thanks to its advantageous geographical position it has long ranked as one of the chief commercial seaports of the Baltic.



WITHIN THE OLD ABBEY GROUNDS OF OLIVA A RURAL COMMUNE INCLUDED IN THE FREE STATE OF DANZIG

The Free State of Danzig, lying between East Prussia and the Polish Corridor, has an area of 754 square miles, with an approximate population of 305,000, of which nearly 200,000 are centered in the city of Danzig, while the total boundary line is given as 147 miles, including 33 miles on the sea. The late enclosures (over 600) of estates districts, and 34 rural communes of the last-mentioned type, the largest are Oliva and Oliva, each with over 2,000 inhabitants. Oliva contains a once-celebrated Cistercian abbey founded in 1137 and suppressed in 1806, the garden of the Abbots Palace being here a spot of considerable amenity.



Georg Haackel

PART OF DANZIG'S PICTURESQUE GREAT MILL

Adjoining the beautiful S Catherine Church, famed for its fine peal of bells, stands the Great Mill, built many centuries ago by the Teutonic Knights, and still fed by the Radaune river, an arm of the Vistula watering the western part of the city

Where the streets are wide enough trees are planted, and their summer green blends beautifully with the toned reds of the weather-worn brickwork. West of the town, outside the walls, lies a number of residential suburbs, like Langfuhr, the prettiest and most attractive of all, and Oliva, where many of the well-to-do families live. To Langfuhr the finest and busiest of the city's main arteries runs.

Danzig has hitherto ranked as a fortified city, but its defences, though elaborate, would afford but little protection in modern warfare. They comprise a series of massive ramparts, supported by twenty bastions and by deep moats, and also arrangements for

flooding the contiguous country at need. Defensive works have been constructed on the Hagelsberg and the Bischofsberg, hills lying to the west and overlooking the town, harbour and river, the former being connected with the town by a covered way. A succession of blockhouses and other works protect the river down to its mouth, where there are strong forts and batteries, while the island of Holm, lying in the stream, is also strongly fortified.

Ancient street names like Dominican Place, Dominican Wall, Bishop's Hill, Bishop's Street, Priest Street, Nun Street and the like attest at once a town of strong ecclesiastical traditions. Danzig has at least a score of old churches, apart from modern edifices of the kind, two-thirds being Protestant and the remainder Roman Catholic. The finest of the churches is that of S Mary, the

traditional parish church of the town, which was built between the years 1343 and 1502. It is a beautiful three-aisle structure of large proportions, its length being 350 feet and its width 113 feet, with a main tower 247 feet high and a series of ten smaller towers.

It was an ingenious idea of the architect to carry the flying buttresses inside the building in vaulted form, so that the spaces thus gained might be used as chapels. The central tower was never finished and perhaps never will be, with the result that it ends in a graceless cap-like extremity relieved by two peaks. There is much beautiful painted glass in the great windows, and the interior is otherwise rich in treasures.

The wooden high altar is a finely carved piece of work dating from the beginning of the sixteenth century. There is a picture of the Last Judgement by Hans Memling which took Napoleon's fancy and found its way to Paris with much other loot from Germany and Russia, but was subsequently recovered. In the same place is hung a life-sized hand, displayed by way of warning since it is described as having been raised by a child against his

parent and another curiosity is an astronomical clock of great age.

Danzig is equally rich in its secular architecture. Its public buildings form a history of its commercial development and the political vicissitudes through which it has passed. The noble town hall built in Gothic style with a tower proudly rising to a height of over 270 feet dates from the fifteenth century and is one of the glories of Danzig. The council chamber, its



Georg Haeckel

GATEWAY AND GRIM TOWER AT THE WEST END OF LONG STREET

From each period of Danzig's history varied monuments have been handed down to modern times, so that a survey can be made of the city's architectural progress from the fourteenth to the twentieth centuries. Long Street (G) is, seen above, was erected in 1611; behind rises the Stockform, dating from 1346 and 1508, an old torture chamber recalling its sinister associations as city prison.

panelled walls rich in carving and its ceiling exquisitely decorated, is a gem of art. In the centre of the ceiling is a large circular painting showing in every detail the famous High Gate, surmounted by a bird's-eye view of the city, most of whose towers and steeples are clearly shown. Among the mural portraits is one of a chief mayor of olden times, who is shown as looking down upon the round table where sit the City Fathers, holding up a finger in warning that serious business can only be transacted in an atmosphere of silence and restraint.

Relic of Medieval Justice

The Stockturm was of old the city prison, and a forbidding building it looks. It is a square structure, the lower part massive and heavy and almost windowless, while above are two tiers of windows, and crowning the centre of the roof is a lofty dome-like pinnacle. An uncanny feature of the place is the quondam torture chamber, in which confession of guilt was not infrequently wrung from unwilling, and perhaps at times innocent, prisoners. The Great Mill, still fed by water from the Radaune, is another of Danzig's archaeological treasures; it was built many centuries ago by the German knights who Christianised the original Prussians, but the castle which they set up hard by has disappeared. The old Franciscan monastery, a building in the late Gothic style, restored half a century ago, now houses the municipal picture gallery and museum of antiquities.

Danzig's Delightful Surroundings

The most famous of Danzig's commercial buildings is the Corn Exchange (Artushof, or Junker's Hall), which was built in medieval times to serve as a meeting-place for the merchants of the city, who were then known as Junker, a term later applied exclusively to the squires of large estates. The Corn Exchange contains a single large hall of noble proportions, its ceiling being supported by four massive granite

columns. The walls are profusely decorated with pictures and carved work, representing mythological scenes and incidents.

Danzig is fortunate in its natural surroundings. The country around is undulating and densely wooded with beech and fir, and contains much scenery of great if quiet beauty. The view from the Bischofsberg takes in a wide expanse of land and sea, with, for foreground, a vista of lofty church towers, old streets of red-brick houses and avenues of trees leading out into the open country. Along the banks of the Vistula are quaint little fishing villages which are much frequented by Danzig folk in the summer time. A popular rural rendezvous in the summer is the Swiss Garden, with the Cafe Schahnasjan, lying beyond the western suburb of Petershagen.

Sturdy Spirit of Independence

There is no mistaking the spirit of the Danzigers—they are characterised by an intense pride of their native town and a persistent devotion to its traditions. This strong local sentiment is unquestionably rooted in historical associations. Few German towns have had a more eventful career than Danzig. Again and again it has had to fight for its very existence; it has known periods of prosperity and glory as well as of impoverishment and abasement.

One prediction may be made with a fair degree of assurance. It is that Danzig will continue to thrive. During the early days of the new regime there seemed a prospect that the increasing trade to be expected, owing to the creation of the Polish republic, would at once give rise to unexampled prosperity, and a large amount of unhealthy speculation in real property took place. These expectations were damped by the economic collapse of Germany, the internal difficulties which have held back Poland's development, and the stagnation of Russia's trade, yet the free state has held its own in trying circumstances, and there can be no doubt that a bright future awaits it.

DELHI

India's Capital, Age-Old and New Again

by Edward E Long

Author of *The All India Moslem League* etc.

I SEE the Delhis of the past now as I saw them first one day in mid January when having entered the city overnight from the south I awoke to find the sky dull and grey and a biting wind from the north-east sweeping over the plains without the city walls. There was a sting in the air almost as keen as that of impending snow but in the place of snow lay dust a white dust thick on the roads thick on the scanty vegetation lining them, thick on the legs of all those who trudged along the highway.

Before me lay a wide plain with one dominating central ridge flanked by the Jumna and the modern Delhi on which uprose and fell variously situated the great cities of the past whose ruins scatter the plains to-day—here a massive fragment of a red sandstone city wall there the keep of a medieval Indian fortress, beyond a dome-shaped tomb and mosque farther away a solitary lofty minaret and in the far distance the crumbling walls and towers of a great palace.

Procession of the Delhis of the Past

Indraprastha with its fair-skinned Aryan settlers, the Red Fortress town of Anang Pal Lord of the Tomar Clan Old Delhi the city of the Hindu Chauhan Chief Prithwi Raj greatest and last of his line, who challenged the might of the Moslem Mahomed of Ghor and was overthrown the great Moslem capital of Kutb-ud-din, famous founder of the illustrious line of the Delhi Slave Kings which furnished India with its only woman ruler Raziya—all the Delhis of the past rose before me as I gazed.

Then came Suri, the Delhi of the Moslem warrior Ala-ud-din first to lead a Moslem

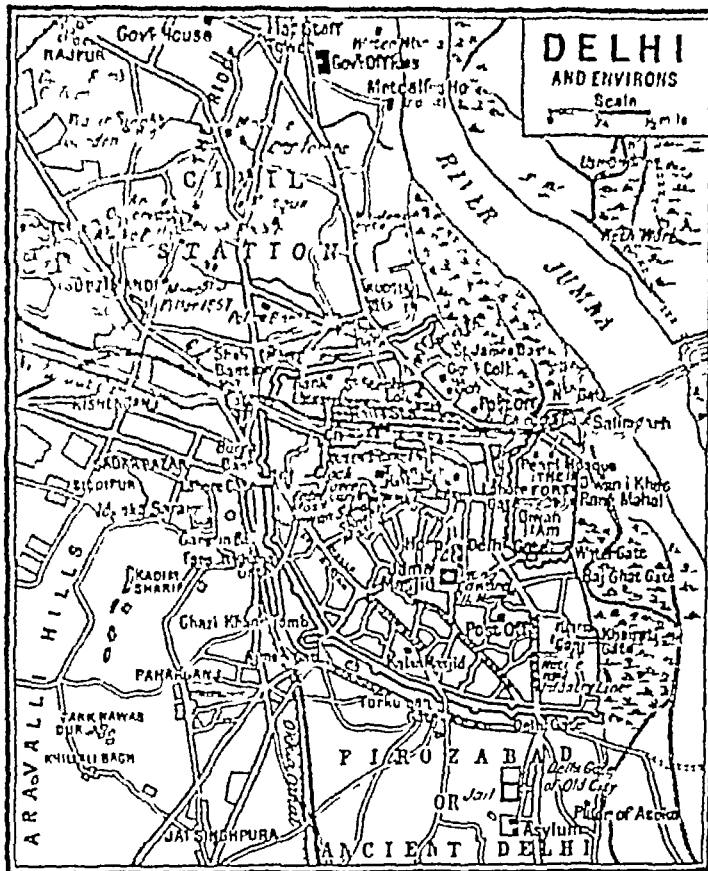
army into central and southern India Tughlakabad the Delhi of Ghiyas-ud-din Tughlak, the Turki slave who rose to highest power and became founder of a long line of kings Jahanpanah The Refuge of the World —the Delhi built by his son Mahomed bin Tughlak

Long-lived City of Firoz Shah

Then greatest perhaps of all the Delhis of old Firozabad the creation of Firoz Shah destined to outlive all those cities which had gone before to be sacked by the cruel remorseless Timur the Tartar afterwards to witness the uprise of the Saiyyid Kings and of the Afghan Lodi line to welcome the famous Babar the Turk fresh from his victory on the fatal field of Panipat, hard by over Ibrahim II the last of the Lodis to remain in peace under his worthy son Humayun until the advent of the fierce Sher Shah the Afghan and then passed over by the renowned Akbar and his profligate son Jehangir to vanish like its forbears in crumbling ruins and give place to the great new Delhi of the Emperor Shah Jehan.

But what remains of these Delhis of the past? Of Indraprastha not a stone which can be authenticated absolutely indeed the city itself is semi-mythical, founded, according to the Mahabharata, by Yudisthira and his brothers the five Pandavas. Indraprastha may be a myth but there exists to-day on its reputed site a small village four or five miles south of Delhi which bears the name of Indrapat, and seems to be a link with that first settlement of the Aryans in this neighbourhood.

But history proper starts with the fortress built by Anang Pal where the



SITE OF MANY DELHIS OLD AND NEW

iron pillar of Chandragupta Vikramaditya, most powerful of the great Gupta kings of Oudh, still stands—a solid shaft of metal, sixteen inches in diameter and over twenty-three feet in height, set in masonry and extending three feet below the surface of the ground. It dates, probably, from A D 400, it is unruined and the inscription on it is remarkably sharp and clear. Anang Pal built in the middle of the eleventh century. In his fortress he erected many temples, and the site selected by him appears to have been that also of Prithwi Raj. It is difficult to distinguish between the remains of the two cities to-day, and both are now known as Old Delhi.

Kutb-ud-din conquered and converted Old Delhi, as largely as possible, into a Moslem capital, and to his everlasting fame he built the great mosque and minaret which bear his name. The mosque is now in a state of ruin, but that which remains conveys some

idea of the splendour of the building in its prime. It consists of an outer and an inner courtyard, the latter surrounded by an exquisite colonnade, the richly decorated shafts of which were torn from the precincts of Hindu temples. Originally plastered over to conceal the idolatrous ornamentation from the eyes of the Moslem faithful, the stucco has now fallen away, and the delicate workmanship of the Hindu artists can be seen in all its former beauty. Eleven magnificent arches close the western façade, Mahomedan in outline and design, but with intricate lace-work detail carried out by Hindu workmen.

Not the least of the wonders of the Kutb Minar is its marvellous freshness, and yet it was begun by Kutb-ud-din in A D 1200 and the two last storeys were added by Firoz Shah 150 years later. It towers into the sky amid a waste of splendid ruins and is held by some to be the most perfect tower in the world—certainly it is one of the seven wonders of architecture in the land of Ind. A gracefully tapering column, plain and fluted, five storeys high, of red sandstone and white marble, the dark purple-tinted red of the base toning gradually as it ascends to a pale pink and on to a deep orange at the summit, where it meets and blends with the blue of the Indian sky—it is a poem in coloured stone.

Siri, built by Ala-ud-din in 1303, lies three or four miles north-east of Old Delhi and some seven miles south of modern Delhi. Its walls, 17 feet thick, are practically obliterated to-day, gone is the Palace of a Thousand Pillars, and all that remains is one of the

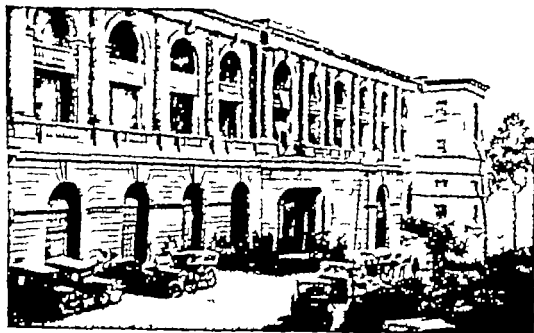
building of Akbar known as the Hauz Khas and beside it set up in a later age the tomb of Timur Shah. The massive fortress city of Tughlakabad some four miles southwest of Old Delhi and is farthest of the old cities from the Delhi of to-day. A good part of the city walls remain and the ruin of a great citadel and deserted streets mark its site but inhabitants there are none.

Tughlakabad was deserted when its founder was scarce dead by his son Mahmud bin Tughlak who thence attempted to move the seat of government thence from to Daulatabad in the Deccan 80 miles away and the traveller Ibn Batuta who saw it empty gives a graphic picture of its desolate magnificence of bare and deserted buildings fit only for a ghost—a city of the dead. And through it all that stout old warrior Tughlak who built it leapt on in his great tomb which lies not in a garden but in a strongly fortified citadel and with its massive wall and bold outlines forms a picture of a warrior's tomb unrivalled anywhere.

The site of Jahangir's Mahomed bin Tughlak's city was midway between Old Delhi and New Delhi but it was razed to the ground by Sher Shah and of these and its buildings nothing exists at the present time. Timur Shah's Daulatabad was very near to modern Delhi lying just south of it and in places overlapping it. One memorial that of the city, the pillar of Asoka a monolith 42 feet in height of pale pink sandstone bearing an inscription in Sanskrit. It was set up by Timur Shah near his palace and the pillar and it even then he was held to have had crumbled into dust of the plan.

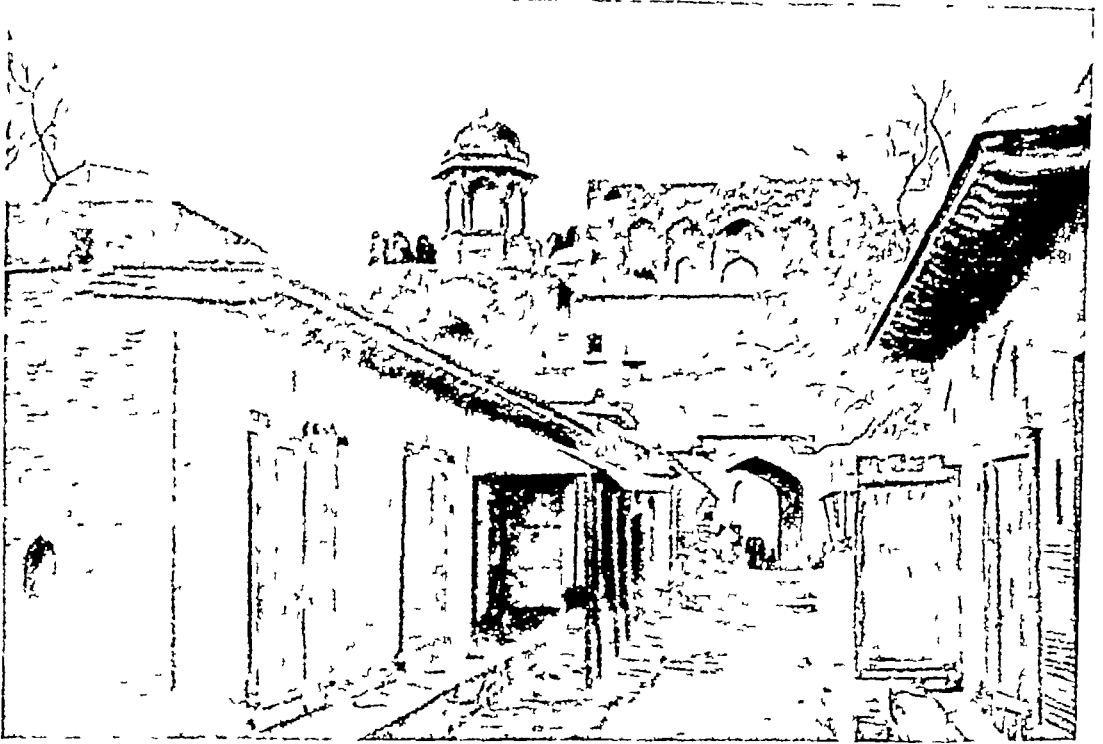
One other Delhi there has been Shahpur the city of Sher Shah the ruthless Afghan warrior who fought Humayun beat him and sacked Daulatabad. Part of the city he destroyed rebuilt and then added to it a new portion naming the whole Shahpur. Practically nothing remains of it but there is on its site a village bearing the name. Sher Shah gave to his city.

The Delhi of to-day is a city and a small province with an area of 58



KODAK SAFETY

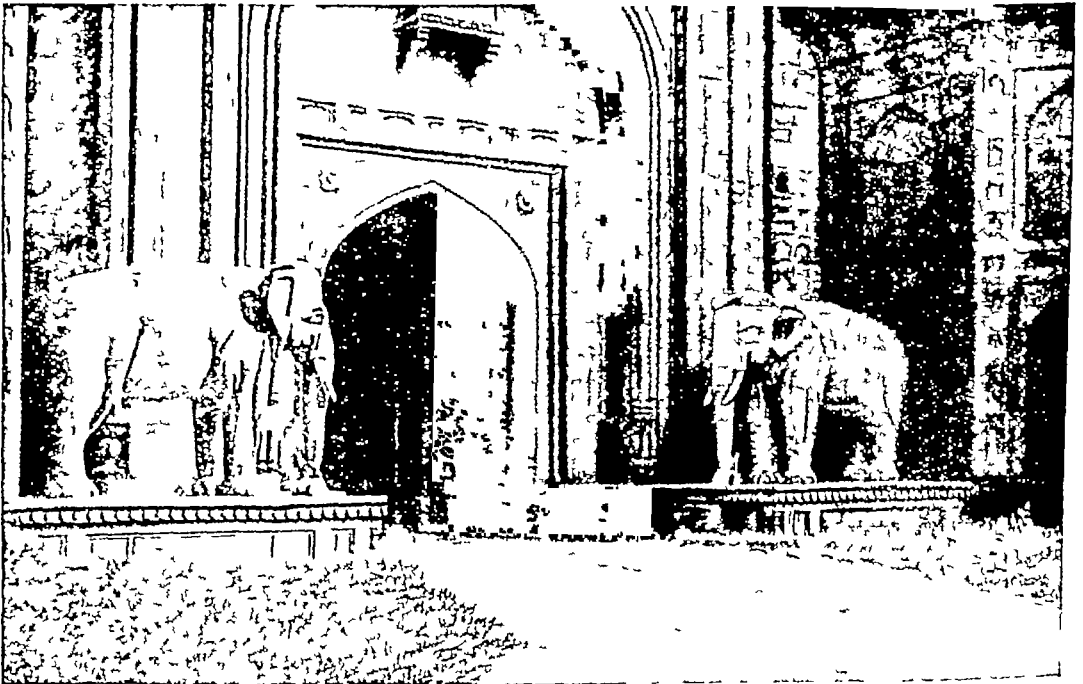
MAIDEN'S HOTEL, A FASHIONABLE MANSION IN THE CIVIL STATION
During the occupation of the fine new capital of India on the steep slopes of the hills to the south of Delhi, on the fringe of the tract occupied by the Delhi of the past, the northern suburbs provided the temporary quarters of the government of India. Excellent hotels, fine parks and broad, well-paved roads have transformed this district into a very pleasant residential quarter.



John Bushby

RUINED GATEWAY IN THE HOARY WALLS OF INDRAPAT

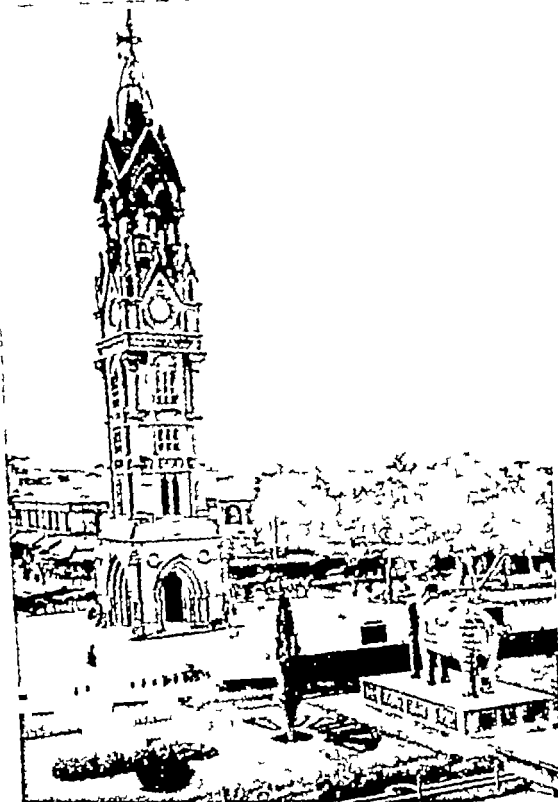
Nearly every traveller to Delhi is familiar with the walled village of Indrapat, lying close to the bank of the Jumna, a few miles south east of the modern city. This small village is reputed to occupy part of the site of Indraprastha, founded by the early Aryan immigrants, and although this tradition is held to be correct, no vestige of any prehistoric town is now traceable.



W Wimbledon Hill

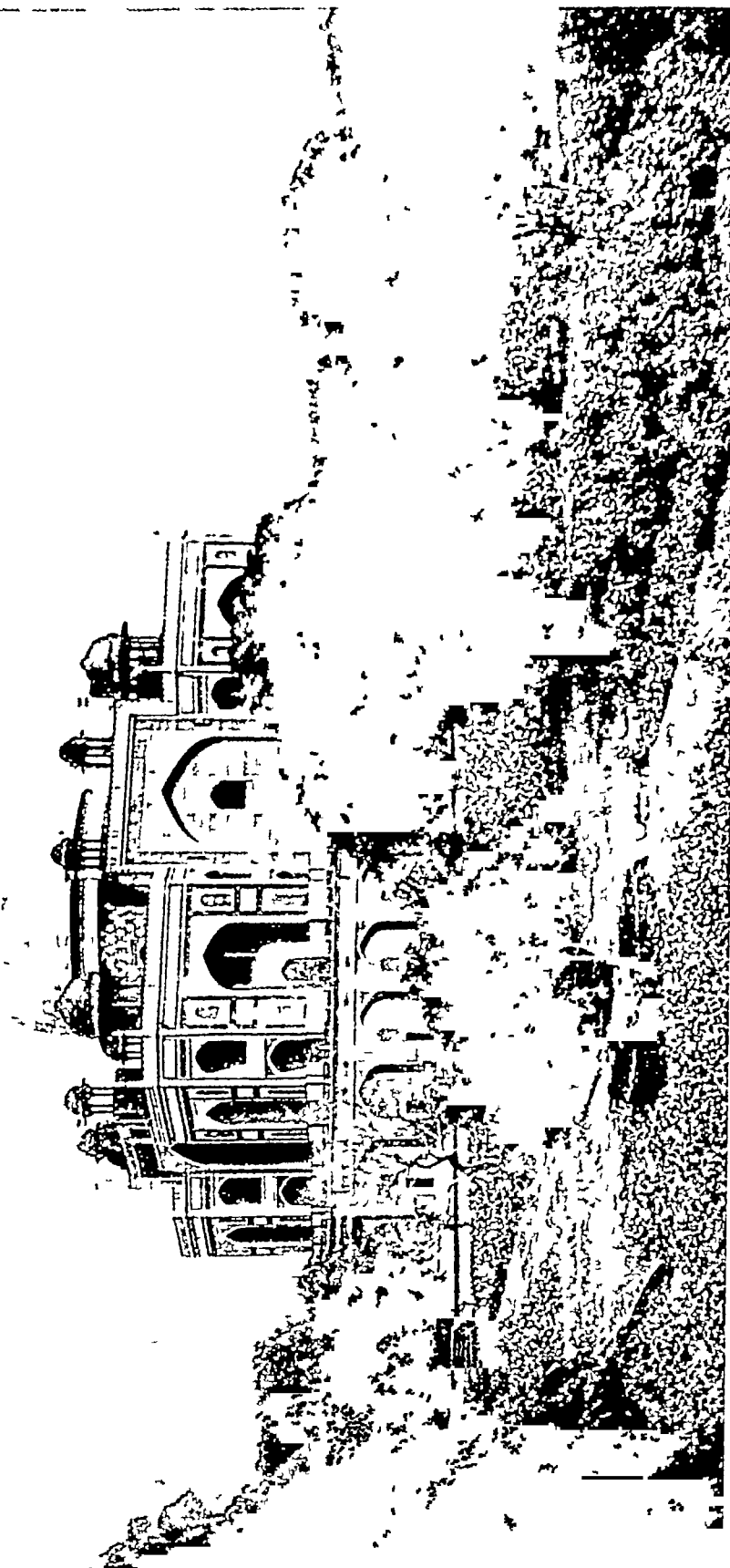
TWIN STONE ELEPHANTS AT A GATE OF DELHI FORT

The Mogul Fort and Palace, built by Shah Jehan between 1638-48, has two handsome gates, the Lahore Gate on the west side leading to the arcade—"the noblest entrance known to belong to any palace"—and the Delhi Gate at the west corner of the south side. At the Delhi Gate, between the inner and outer gates on either side of the archway, stand two massive stone elephants.



CLOCK TOWER IN DELHI'S POPULAR PRINCIPAL STREET

Chandni Chowk, or Silver Street, the one time richest street in India, is the main thoroughfare of Delhi and runs across the modern city in easterly direction from the Fort to the Jami Masjid. The small square at its eastern extremity gives the Northbrook Clock Tower the title of time-keeper of which are seen to fall all things from the Municipal Hall whence the above photograph was taken.



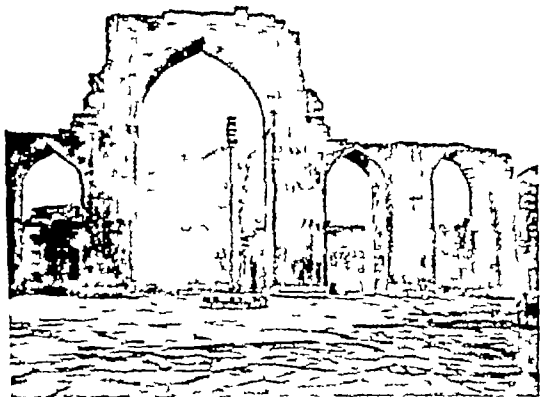
NOBLE MAUSOLEUM OF THE EMPEROR HUMAYUN, WHERE HODSON CAPTURED THE MOGUL PRINCES IN 1857

Illustration Travels

Some three miles from the Delhi Gate rises the magnificent mausoleum of Humayun the Mogul Emperor who occupied the throne of Delhi from 1530 until 1540, when he was forced to retire to Persia. In 1555 he again took possession of Delhi, but was killed the following year. The mausoleum, a building of red sandstone, artistically picked out in relief with white marble, crowned by a marble dome, stands upon an elevated platform of red sandstone within a terraced garden covering thirteen acres. It was here that Lieutenant Hodson received the surrender of Bahadur Shah, ex king of Delhi, and his sons, after the fall of the city in 1857.

square miles and a population of 485,188 (Delhi city 371,490) and is administered by a chief commissioner. The rural portion of the area consists mostly of the Jumna floodland, a fertile upland plain of dry well land with a light rainfall but irrigated for the most part by the West India Canal. The flora and fauna resemble those of the Punjab, also the climate

that has made the life so attractive and led chiefs, kings and emperors in turn to found mighty cities thereon. The river Jumna flows on the north and the Ridge on the other with the main and only beautiful road into Hinduistan from the north passing through it. South of the river is a deadly desert, north is a marshy swampy mal country. Between the years 1038 and 1058 Shah



Research Co. Inc.

SCREEN OF ARCHES AND IRON PILLAR OF THE KUTB SACRED RUINS

The Kutb group of buildings at Old Delhi is in part the work of Kutb-ud-din Aibak who, after the capture of Delhi in 1193 set about the erection of the Mosque and its magnificent screen of arches. Before the central arch, 53 feet high, stand one of India's most curious antiquities, a solid block of wrought iron nearly 4 feet in length dating probably from 1000.

The river Jumna flows through the province from north to south and except for a short distance bordering the new Delhi forms the boundary between Delhi Province and the United Provinces. A prolongation of the Aravalli Hills entering the province on its southern border passes west of Delhi city where it forms the historic Ridge and terminates on the right bank of the Jumna three miles north of the city. It is this commanding position

Jehan built the Delhi we know to-day and the purely Indian part of it remains substantially the same now as it was then—a mass of narrow and winding mean streets sometimes ending in a cul-de-sac often lined with as mean houses but studded with beautiful mosques though most of the palaces of the nobles have disappeared.

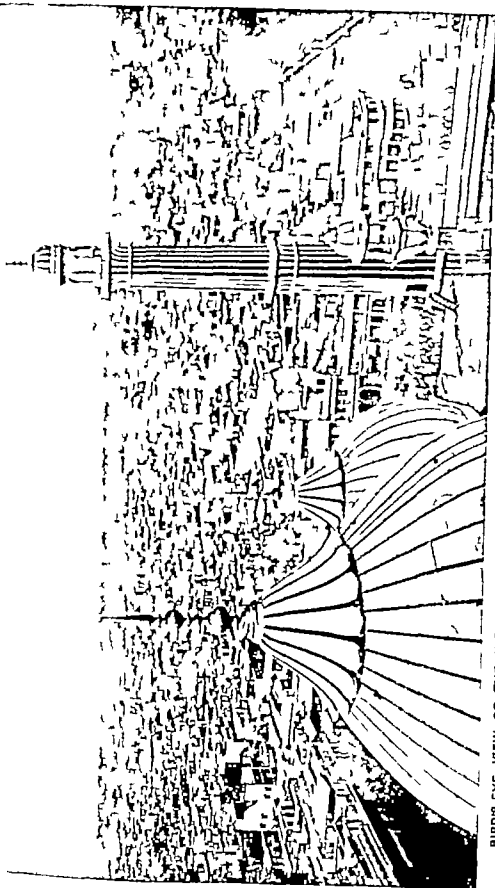
The main thoroughfares however are broad straight well metalled drained and lighted and they possess



John Bushby

VARIED VEGETABLES AND LUSCIOUS FRUITS FOR SALE IN AN OPEN-AIR MARKET OF INDIA'S CAPITAL CITY

The bazaar of Delhi, much frequented by sightseers and tourists, contain many lovely specimens of native handicraftwork intermixed with the gimcrack trumpery of the Orient and in some of the shops a wonderful choice of souvenirs is offered to the globe trotter. As an industrial centre, served by four railways, Delhi has considerable prominence. Its local craftsmen are far famed for their beautiful work, which includes the making of jewelry, ivory and wood carving, silver, brass and copper work, glazed pottery, weaving and embroidery. The modern industries are represented by cotton and flour mills, biscuit and sugar factories



BIRD'S-EYE VIEW OF THE IMPERIAL CAPITAL OF INDIA FROM ONE OF THE MINARETS OF THE JAMA MASJID

Delhi lies 956 miles by rail north-west of Calcutta, on the right bank of the Jumna river on which fact for the many ancient Delhi is spread thickly and often captured, Delhi passed through many vicissitudes, but did not become the seat of British rule until 1857, when the British government decided to make Delhi the official Imperial capital. The use of this new permanent capital of the Indian Empire was decided by the British government in 1857.



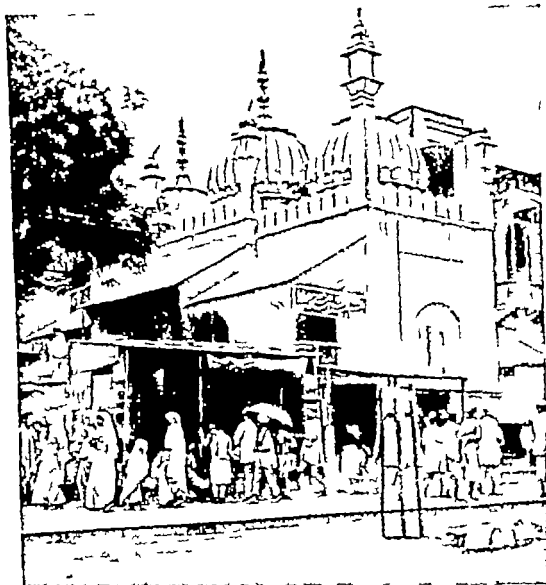
John Bushby

SUNLIGHT AND SHADE IN AN ALLEY OF MODERN DELHI

Encircled on three sides by a lofty red sandstone wall, three and a quarter miles in extent and set with massive gates Shāhjahānabad, the modern Delhi, built by Shāh Jehan between the years 1638-58, contains a compact mass of buildings, threaded with narrow winding streets and with here and there a main thoroughfare broad, straight, well ordered, drained and lighted

many substantial buildings, whilst the principal street—the Chandni Chauk—once one of the richest streets in the whole world, and to this day beloved of sightseers and tourists, has throughout the greater part of its length a row of trees on each side and is an extremely interesting and imposing thoroughfare. The city is enclosed on three sides by a lofty red sandstone wall, three miles and a quarter in extent, with several massive gates, and on the west is flanked by the river Jumna and the

Imperial Palace, known as the Fort Delhi was once entered by fourteen gates, eight on the land side and six on the river, but many have been removed. The principal ones remaining are the Kashmir Gate on the north (in the cemetery near by is the grave of John Nicholson), the Farash Khana and Ajmer Gates on the west, and the Turkuman and Delhi Gates on the south. Within the walls of the city are not only the Indian quarter, but a European business quarter and various



Khan's Gallery

HISTORIC GOLDEN MOSQUE IN THE SILVER STREET OF DELHI

The Sorehri Masjid, or Golden Mosque of Roohan-ud-daula, rises in the Chandni Chauk, or Silver Street, in 1737 when Delhi was sacked by the forces of Nadir Shah, this emperor being monarch, the greatest warrior Persia has ever produced, is said to have stood on the platform of this beautiful sanctuary in silence in remorseless silence the massacre of the inhabitants by his troops.

public buildings. These are in the north and east and are separated from the Indian quarter by the East Indian Railway, which enters the city from the east by a magnificent bridge over the Jumna and traverses it westwards.

South of the railway is the well kept Queen's Garden with Queen's Road, a fine thoroughfare running between it and the railway line, south of the Garden and between it and the Indian quarter the Chandni Chauk stretches also from east to west from

the Fort to the now demolished Lahore Gate, a distance of three-quarters of a mile. Between the Jama Masjid (in the centre of the Indian quarter) and the Fort are the charming Edward VII Memorial Gardens, in which the very imposing and admirably designed statue of King Edward was unveiled by the Prince of Wales when on his tour in India in 1921-22.

The Fort is situated on the east of the city, abuts directly on the river and is without the city walls. Outside also

lie a number of suburbs, chiefly Indian on the south-west and west and European on the north, where are situated the European residential quarters, several excellent hotels and various extremely well-kept parks and gardens, the district being intersected with straight, wide, good-surfaced roads and forming a very pleasing contrast to the congestion of the city. It is in this neighbourhood, too, that the temporary quarters of the government of India are situated and Government House (Viceregal Lodge), the residence of the viceroy.

Native Crafts and Modern Trade

The arts and crafts of Delhi have been famed throughout India for hundreds of years, and under British rule its workmen have not lost their cunning, while their products have achieved a celebrity that is now world-wide. They comprise jewelry, silversmiths' work, brass and copper ware, ivory and wood carving, glazed pottery, muslin, shawls, silver embroidery and miniature painting.

Its advantageous situation as a grain market, a piece-goods distributing centre, and an important railway junction has attracted thither a good deal of European and outside Indian capital of late years, this has been accentuated by the choice of the city as the empire's capital, and it is now a prosperous manufacturing centre, the leading industries being those of flour milling and biscuit making, cotton spinning, weaving and ginning, sugar-cane pressing, iron and brass manufacture and printing.

Glories of Shah Jehan's Palace

The architectural glories of Delhi, renowned all the world over, lie chiefly within the Fort—the once great Imperial Palace of Shah Jehan. Built on a uniform plan and by the most magnificent of the royal builders in India, it is on a most elaborate scale, forming a parallelogram measuring 1,600 feet east and west and 3,202 feet north and south exclusive of gateways. On all sides it is surrounded by a very noble wall of red sandstone relieved at inter-

vals by towers surmounted by kiosks, and the principal entrance faces the Chandni Chauk. Entering its deeply-recessed portal you find yourself in a vaulted hall, rising to two storeys and 375 feet long, having the effect of the nave of a gigantic Gothic cathedral and forming the noblest entrance known to belong to any existing palace.

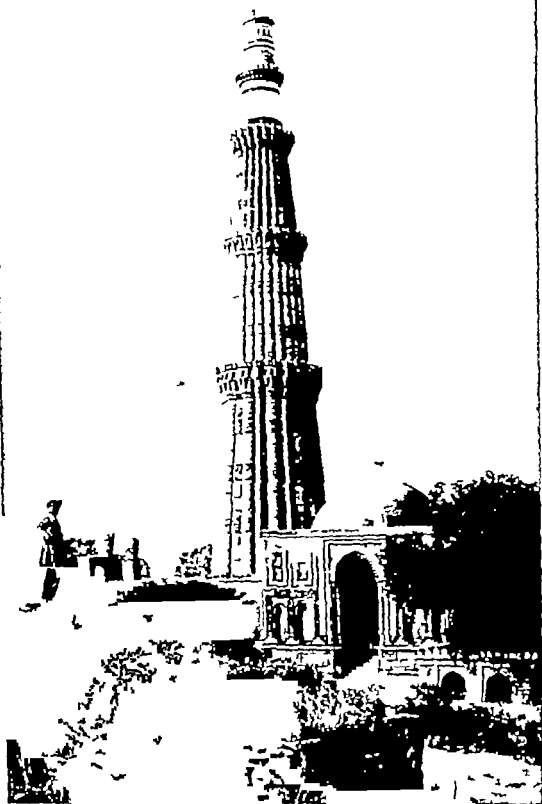
Facing this entrance is the Music Hall, the Naubat Khana. Beyond it lies the great court of the Palace, in the centre of which stands the Diwan-i-'Am, or "Hall of Public Audience," and behind this a court containing the Rang Mahal, or the "Painted Chamber." North of this central range of buildings is the Diwan-i-Khas, or "Hall of Private Audience." The whole area of the palace is more than twice that of the Escorial, or of any palace in Europe. Such was the scale of building in the time of Shah Jehan.

Fate of the Famous Peacock Throne

The Diwan-i-'Am is a splendid apartment, its most striking feature being its engrailed arches. It was here that the Great Mogul was accustomed to receive petitions in person. In it, in a recess in the back wall, formerly stood the world-famous Peacock Throne—the most gorgeous example of its class that perhaps even the East could boast of.

The throne, valued at £6,000,000, was carried from Delhi in 1739 by Nadir Shah, after his capture of the city. Rumour says it exists to-day in the treasure-house of the Shah of Persia, but Lord Curzon, who once examined the thrones there, states that nothing remains of it, except, perhaps, some portions worked up in a modern Persian throne.

An exquisite gem of Oriental architecture is the Diwan-i-Khas. It is smaller than the Diwan-i-'Am and consists of a pavilion of white marble so pure that in parts it is semi-transparent. Overhanging the river it contains a rich and rare collection of the best of the ivory of the East, some of which it is believed that a noble

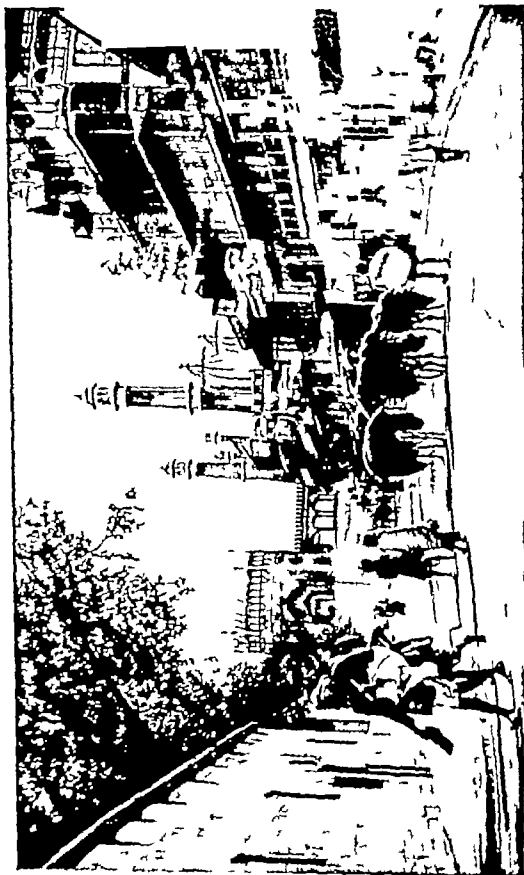


Kutb Minar

DELHI Kutb Minar is a tower of victory and a grand specimen of Moslem work. Of red sandstone and marble it is 238 feet high.



1611
 The Jama Masjid is one of the very few mosques in India designed to present a pleasing exterior, and it
 stands prominently on an enormous basement, a landmark above the tree-grown spaces of the city



DEDU In this vista of the Jama Masjid over the backs of the kneeling children look across the front of the
 of steps leading to one of its three gates. The minaret stands 17 feet from the ground



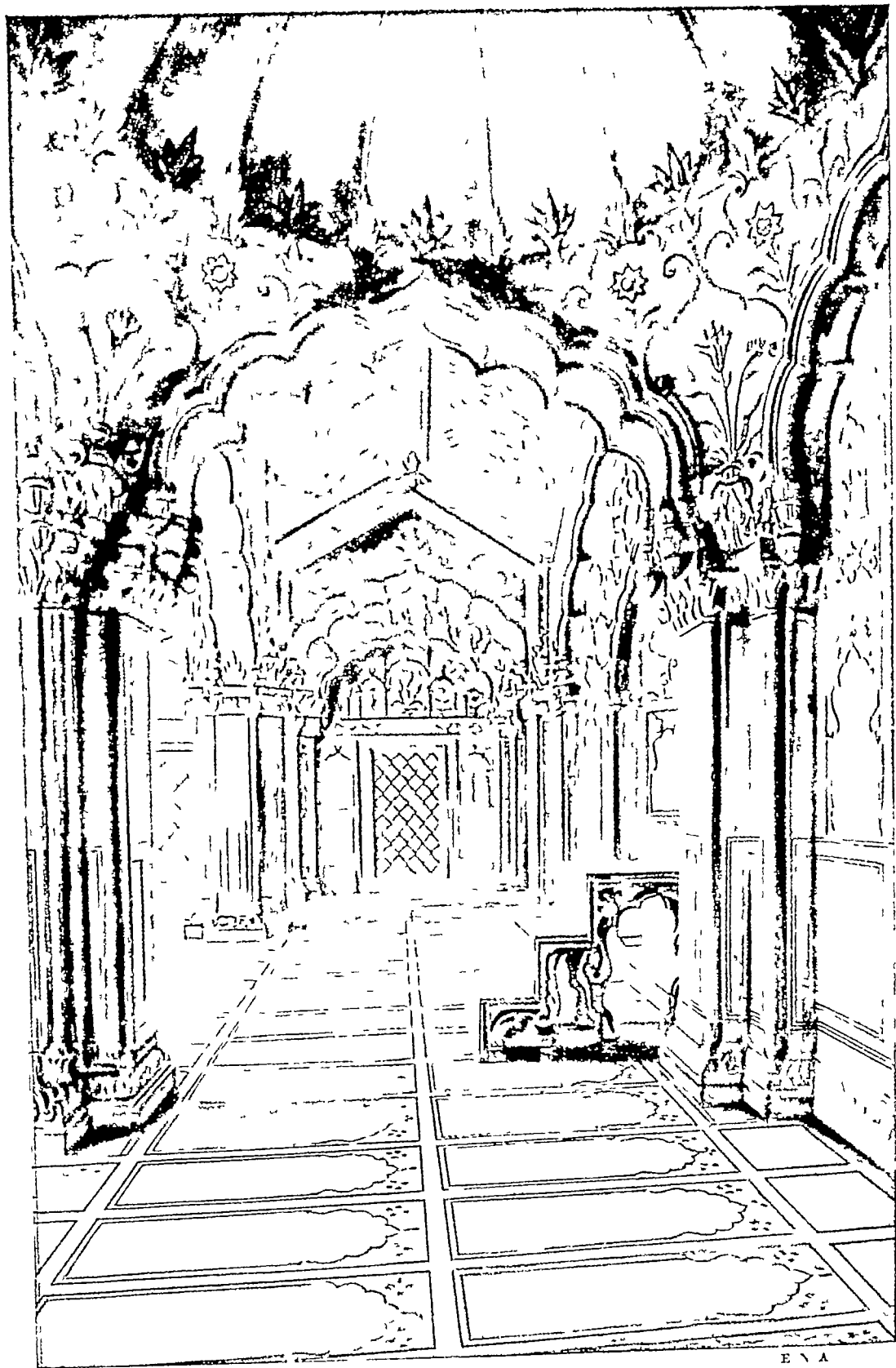
E N A

DELHI Through the Jama Masjid gates the pilgrim enters a fine courtyard, 325 feet square, with a marble basin in its midst

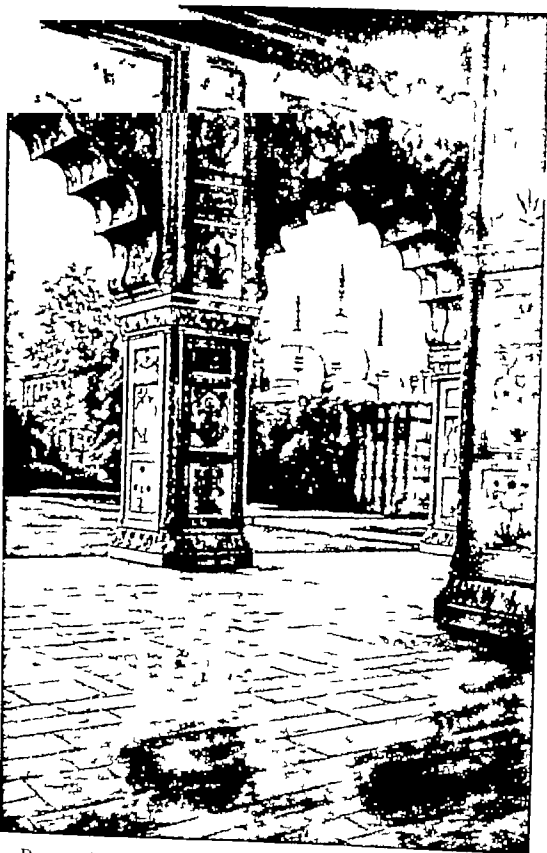


LEADER TRAVEL

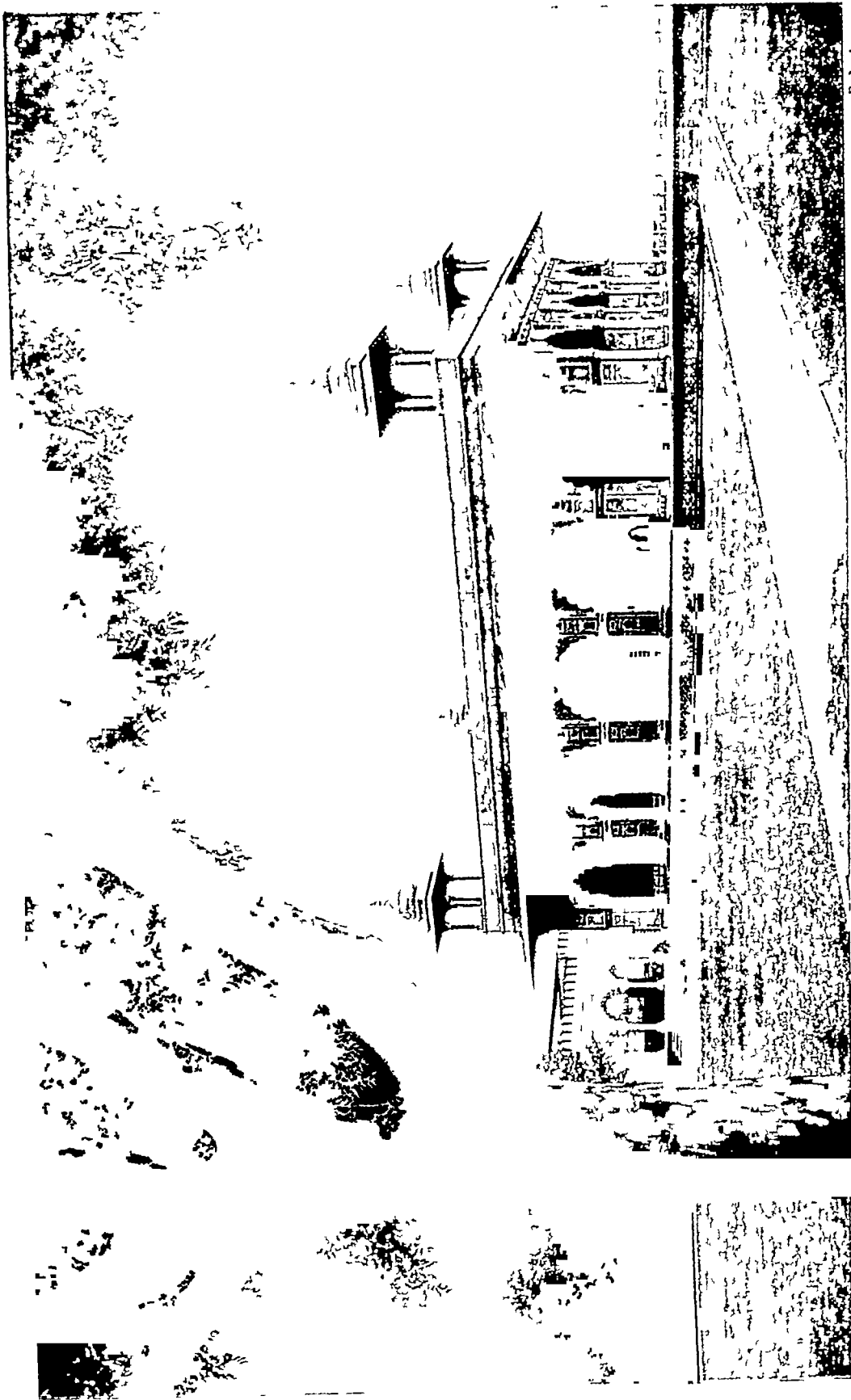
DELHI This gallery with its gorgeous arabesques is in the Rang Mahal or Painted Palace, once the residence of the Chief Sultana



DELHI *Opposite the Royal Baths stands the Moti Masjid, or Pearl Mosque, built A D 1659 by Aurungzebe, the great Mogul Emperor*



DELHI Known as the Fort the Mogul Palace was built by Shah
Jehan Here the Moti Masjid is seen from the Divan i Khas



DELHI By the eastern wall of the Palace is the Diwan-i-Khas or Hall of Private Audience, measuring 90 feet by 67 feet It is built of white marble and inlaid with jewels, though the silver ceiling was removed by the Jats

platform a marble pavilion supported on a double row of marble pillars. The inner face of the arches the pendentives and the piers supporting them are covered with flowers and foliage of delicate design and dainty execution executed in green serpentine blue lapis lazuli and purple jaspers. Around the roof of the hall runs the famous inscription "If a Paradise be on the face of the Earth it is this—it is this."

The outstanding architectural feature of the city is the great mosque known as the Jama Masjid. It rises boldly from a rocky eminence almost in the centre of the Indian quarter was built by Shah Jehan and is held to be one of the finest buildings of its kind in India. The front courtyard, 450 feet square and surrounded by a cloister open on both sides is paved with granite inlaid with marble and commands a splendid view of the entire city.

One of Islam's Finest Shrines

The mosque itself is an oblong in shape. It is 262 feet in length and is approached by a magnificent flight of stone steps. Three domes of dazzling white marble rise from the roof. Two tall and graceful minarets stand at the corners in front. Thousands of Moslems can worship in the great courtyard and the scene on any great day of the Moslem calendar of this vast assemblage in prayer is deeply impressive.

Other buildings of note in Delhi are the Kalan Masjid or "Black Mosque" so called from its dark appearance gained from antiquity since it dates from 1350 the reign of Firoz Shah the Golden Mosque of Roshanud Daula, in which Nadir Shah seated on March 11 1739 gave the order for the massacre of the inhabitants of Delhi and the loot of the town the Pearl Mosque a tiny building added to the Palace by Aurangzebe as a private place of prayer the former British Residency now a government college the town-hall which contains a Durbar Hall a good collection of pictures a museum and a public

library and the Church of St James built at a cost of £10,000 by Colonel Skinner an officer of renown in the service of the Old John Company.

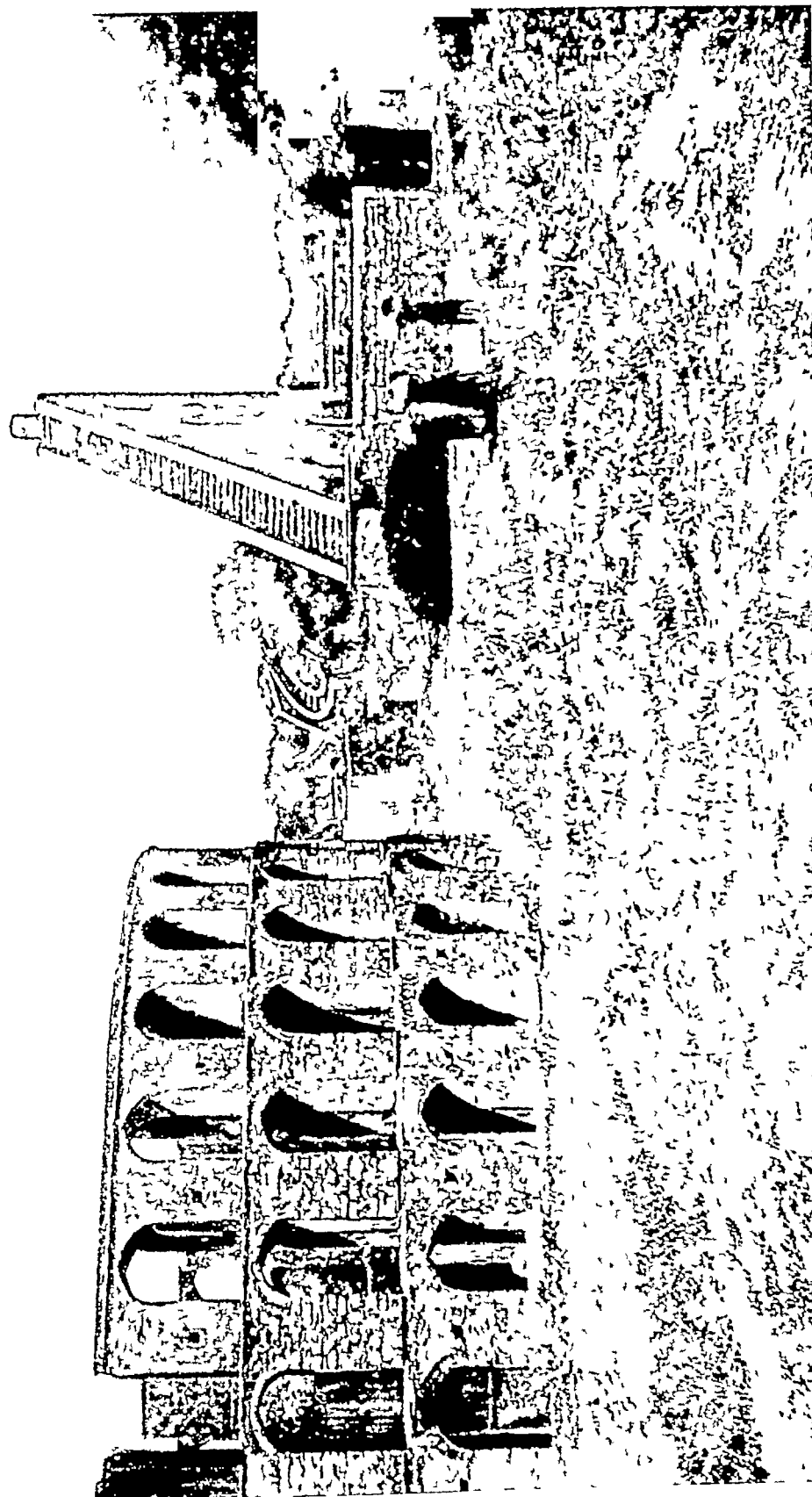
Where Humayun Lies Buried

Outside the city wall to the south and south-west lie scattered many buildings ruined partly ruined or in a fair state of preservation all connected with the history of Delhi. Among these is the tomb of the Emperor Humayun three miles and a half from the Delhi Gate a noble building of rose-colored sandstone inlaid with white marble and with a white marble dome set in a terraced garden surrounded by an embattled wall with towers and four gateways.

A mile westward from Humayun's tomb is the tomb of Nizamuddin a great Moslem saint of the time of the Tughlaks and the first Tughlak emperor one of the principal places of Moslem reverence in all India. It is beautiful without and within its special features being a canopy over the grave inlaid with mother-of-pearl and its costly jasper and marble screens. Close by the shrine each in its little enclosure surrounded by elegant lattice-work of white marble are the graves of many members of the imperial family up to the time of the Mutiny—Emperor Shahjahan Prince Jehangir son of the great Akbar and Jahanara Begum the daughter of Shah Jehan.

Remains of a Great Observatory

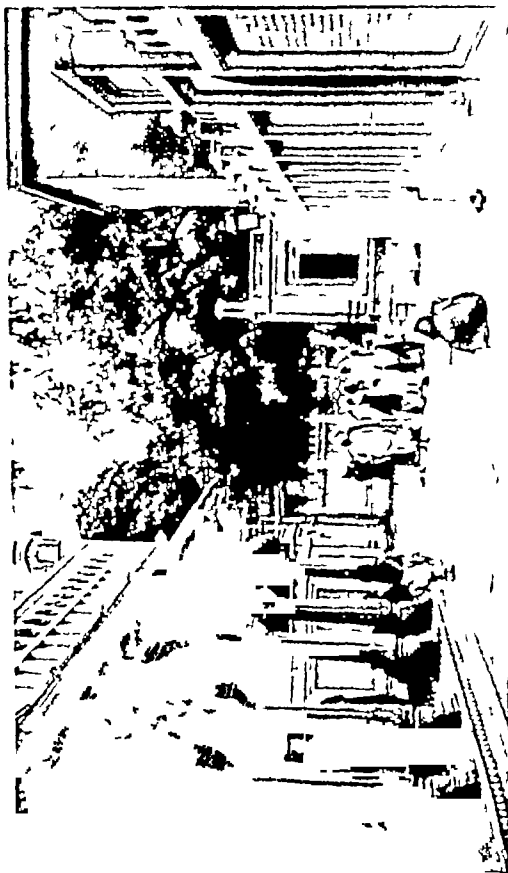
Of peculiar interest are the Hadam Sharif and the Observatory of Jai Singh—the former a slab of stone said to bear the sacred footprint of Mahomet. It is contained in a basin of water on the surface of which float rose-leaves and the basin is built over the grave of Fatch Khan son of Firoz Shah who died in 1374. Of the observatory built in 1724 only the great equatorial dial exists and two round buildings resembling small Roman amphitheatres with tiers of arches for measuring the ascension and declension of the stars.



Recluse Travels

RUINED OBSERVATORY AT DELHI, ERECTED BY THE ROYAL ASTRONOMER, MAHARAJA JAI SINGH OF JAIPUR

Some three miles to the north of the Tomb of Safdar Jang is found a ruined observatory, dating from about A.D. 1725, one of the five erected by the famous royal astronomer, Jai Singh, the remaining four are found at Jaipur, Benares, Multan and Ujjain. The largest structure of the observatory is a colossal equatorial dial known as the Samrat Yantra, or Prince of Dials, the height of the gnomon being 56 feet, 7 inches. To the south of the gnomon lie two circular buildings, resembling Roman amphitheatres, used for measuring the ascension and declension of the stars. All of the decaying structures indicate an astronomical knowledge of a high degree



IN A COURTYARD OF BEAUTIFUL SHRINES, RELICS OF THE ARCHITECTURAL GLORY OF AN ANCIENT DELHI,

The history of modern Delhi from the time of Shah Jehan is a stirring one. Under Aurungzebe it reached the zenith of its prosperity, after his death the Sikhs and Marathas broke away from Mogul rule and even harassed the city.

The Passing of Mogul Rule

Sicked by the Afghan adventurer-king of Persia, Nadir Shah, then by the Afghan Ahmad Shah Durrani, it was twice devastated by civil war, and in 1771 the Mogul emperor Shah Alam became the puppet king of the Marathas, who maintained a Hindu garrison in the proud old Moslem capital. The Maratha challenge of British rule resulted in their overthrow and the restoration of Shah Alam, when British troops entered Delhi for the first time, and a British Resident was appointed. Shah Alam was attacked by the Marathas again, however, when British troops helped to defend Delhi, and as it was clear that Mogul rule was over, the emperor was given a pension and Delhi passed under British rule.

The British brought peace and prosperity to Delhi. Then after fifty-three years of quietude came the Indian Mutiny, the seizure of Delhi by the mutineers, the restoration of Mogul rule under Bahadur Shah, and the gallant recapture of the city by British and loyal Indian troops after a long and arduous siege. From that time on it has known peace and prosperity, though it has witnessed many stirring events of another, a peaceful, nature.

Ancient Preeminence Regained

At the great Delhi Durbar of 1911, when King George V and Queen Mary visited India and, amidst a scene of great splendour, were crowned Emperor and Empress of India in the noble city of Delhi, thus restoring it to its former proud title of "Imperial," the striking announcement was made that henceforth Delhi was to be India's capital.

On account of its healthiness and sanitary advantages, a site was chosen a few miles south of the present Delhi and on the fringe of the tract once

occupied by the Delhis of the past. The new Delhi is to be a well-planned city of imposing buildings flanking broad, straight roads of regular design, for the greater part shaded with trees. Its site is on fairly level ground, apart from a central ridge, dominated by a low hill on which stand the main official buildings and Government House, the latter being on the hill summit, of noble proportions, an old-world Mogul garden behind it and a spacious park beyond. Before it are two magnificent statues of King George and Queen Mary, presented the one by Maharajah Scindhia, the other by the Maharajah of Gwalior.

Noble Appearance of New Delhi

Then appears a broad court 1,300 feet in length and 200 yards wide, laid out with grass and waterways and low trees and a great central column, the gift of the Maharajah of Jaipur. This leads to another court of almost the same proportions, but flanked on either side by the secretariat buildings of the government, with a clear vista down the two courts to an imposing war memorial at the end of the ridge, a grand triumphal arch spanning this broad, central, and gradually sloping way similar to the Arc de Triomphe in Paris, but of simpler design, in honour of the gallant dead of India, Indian and European, who fell in the Great War.

On spacious sites, in commanding positions, stand two cathedrals, one Protestant, the other Roman Catholic, a university, an Institute of Medical Research, a museum and various colleges. Flanking the city, north and south, are admirably designed parks.

And so, by the side of the Delhis of the past and the Delhi of the present, the Delhi of the future is taking shape, in architectural style a blending of East and West, expressive of that cooperation between Briton and Indian which is the keynote of Indian administration to-day, and which may be destined to lead India to the attainment of her great ideal—self-government within the British Empire.

DENMARK

Man-made Home of Agriculture

by J W Robertson Scott

Author of "A Free Farmer in a Free State" (Holland)

A POINTING hand is what the outline of Denmark looks like on the map. And for two generations now Denmark has shown the road towards a higher rural civilization for the world. There is not a day in the year in which some foreigner it may be from Great Britain or one of the countries of the Continent or it may be from a country as far away as Japan is not travelling up and down Denmark eagerly studying the lesson which her rural folk have to teach country people in other land.

There is a peculiarly Danish kind of rural school which Denmark has established. But this is only one of the reasons why rural Denmark is so much visited and written about by social reformers. Unfortunately a large part of what has appeared in print has been inaccurate. There is a reason beyond her rural civilization which makes Denmark specially interesting to British people. It is inhabited by a race whose blood runs in the veins of the British. Of old the Danes harried the shores of England.

Adventurous Spirit of the Danes

Thousands of adventurers must have been lost in their compassless crossings of the North Sea but they poured on the shores of Britain in such hosts as to be able to set up as everybody knows one of her many dynasties. The Danish stamp on British place-names speech and physique can never be lost while there remain towns and villages all over the country ending in *by*, houses and farms called *holm* and while there are born in the northern and eastern counties of England particularly boys and girls whose blue

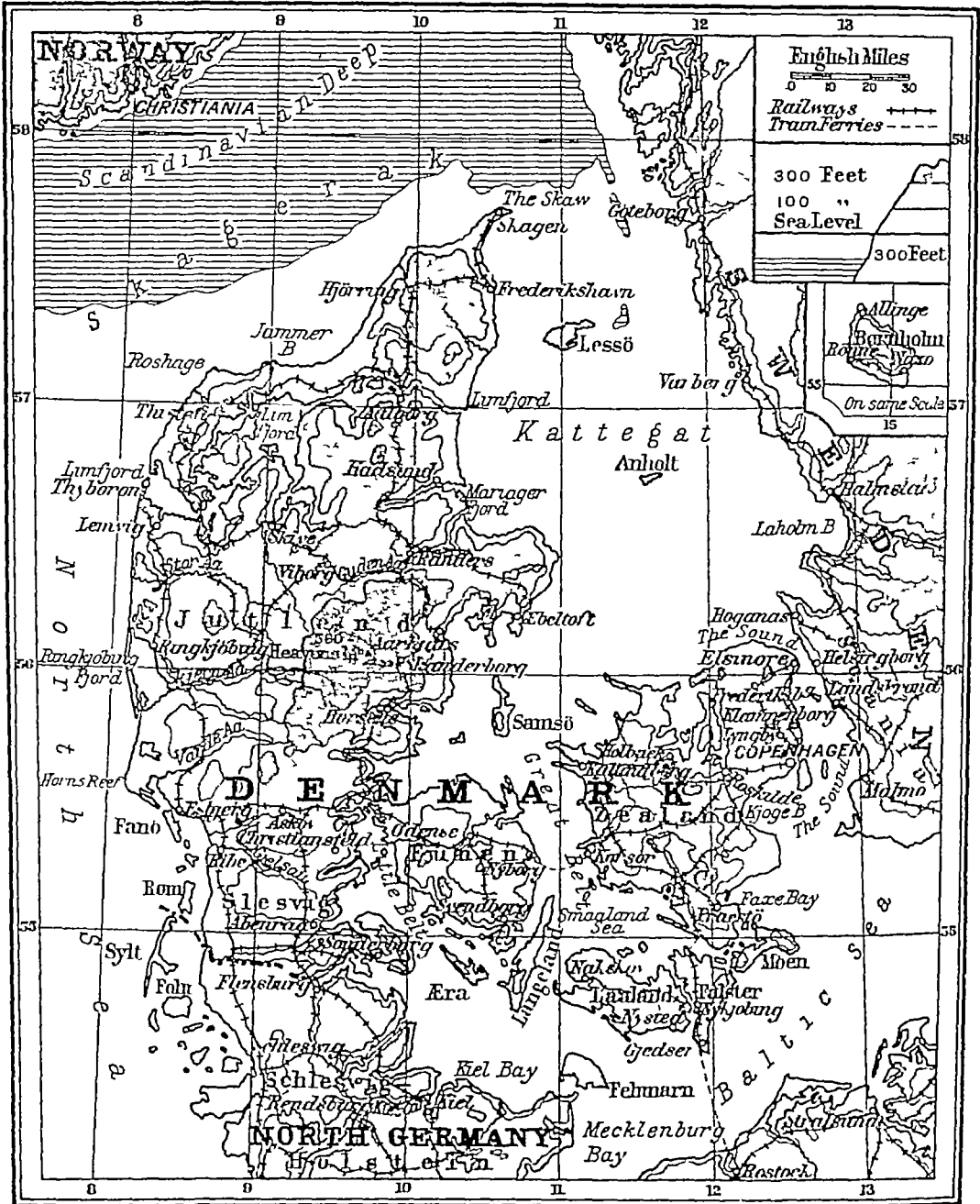
eyes and flaxen hair proclaim their kinship to the Dane.

Britain is also interested in Denmark because Denmark is the nearest of the Scandinavian countries and a marvel has been wrought in Scandinavia. A century ago as an illustrious Dane pointed out Scandinavia was the fighting corner of Europe. Now however unsettled and unfriendly parts of the Continent may be with one another no one dreams of fighting between Denmark and Norway or Sweden.

Races of the Danish Empire

Other things than the racial connexion with the Danes and the fact that Denmark is the scene of one of the world's greatest plays make the Briton at home there. It is northern it lies between the latitude of Darlington and Inverness and three-fifths of its population are islanders. Like Great Britain it is a little country with colonies. If the dominions of Denmark no longer stretch into Scandinavia across the Sound and as they are said to have done of old time into Germany and Russia Denmark has still outposts in Iceland the Faroes and Greenland and until lately West Indian Islands, which were wisely disposed of to the United States.

The Reformation which cost so many lives in Great Britain and the Netherlands was bloodless in Denmark. That it was none the less effective is shown by the fact that while there are more than a million and a half Roman Catholics in Holland there are only a few thousands in Denmark. The Revolution in Denmark was equally peaceful and the seals of state are now in the hands of peasants sons.



ISLANDS AND MAINLAND OF AGRICULTURAL DENMARK

The cockpit of the north, few countries have been more war-wasted than Denmark. The Danes have not forgotten Britain's share in their sufferings. Before Copenhagen in 1801 Nelson fought one of his least glorious engagements. The mythical narrative which is reproduced in a well-known work of reference is no longer countenanced by historians. Six years later Britain appropriated the Danish fleet. There

is a Danish legend that an English captain sprang overboard rather than take part in this oppressive act. Twelve months later the country was invaded.

It is not surprising that the close of the Napoleonic era left Denmark bankrupt. Yet there was to follow, almost within a generation, the struggle, endured in Danish territory, with Prussia. Then came the dogged, pitiful conflict of 1864, which Danish art and

poignantly portrays. The southern provinces of Slesvig and Holstein more than a third of the whole country were torn away (North Slesvig was restored in 1919). Physically and psychologically it was almost as if Britain had lost Scotland had every where galling reminders of alien feet and bitter memories for a lifetime of kin among the slain.

What the Danes had left of their country was not a land rich in natural resources. There is in Denmark no coal that counts and no other mineral. The soil is not considered to be of the first quality. With regard to the climate the prevalent winds are from the west or south-west but the average temperature for the year resembles very much that of Scotland beyond Inverness. There is a rainfall similar to that of the Eastern counties of England but an Essex agricultural delegation found vegetation two or three weeks behind East Anglia," and had evidence that the winters were long Denmark" they were inclined to

think "possesses few material advantages as far as agriculture is concerned. Every visitor to Denmark feels that he is in a wind-swept country. What is called the highest hill is only 560 feet above sea-level. It is named a little pathetically Heaven's Mountain.

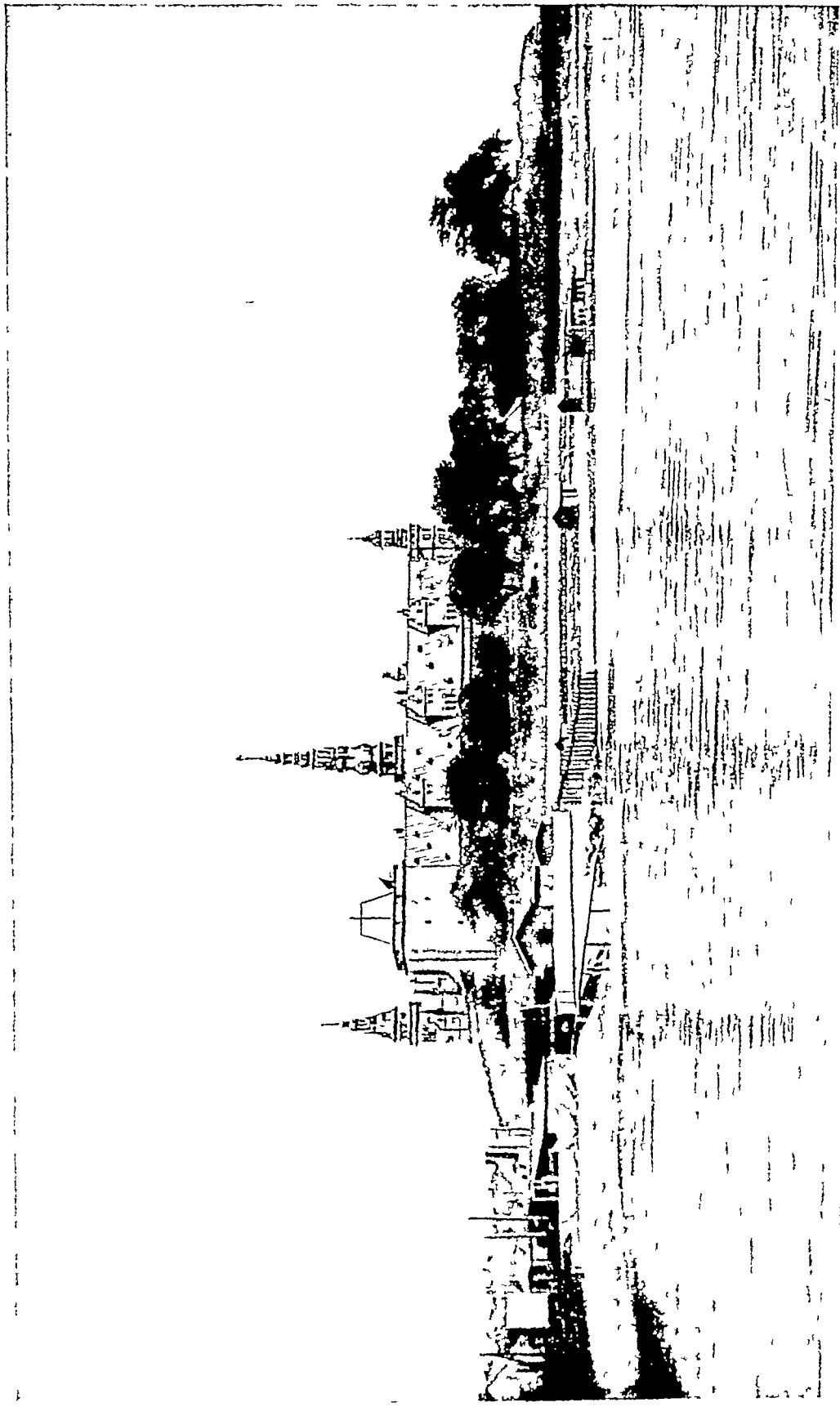
Island breed a race of many fine qualities. But there are difficulties in the way of the development of a country with war debt a country of no great natural wealth a country a third of whose area is divided between 44 islands. Even the capital Copenhagen is so cut off from the mainland that a journey to it means embarkations on two steam ferries the passage by one of which is an hour and a half.

And it is to be remembered that many generations after England had beheaded an unteachable king sane ideals of civil liberty had made such limited progress in Denmark that the government was an autocracy. It is not so long ago either that what is now one of the most enlightened nations in the world submitted to a



FREDENSBORG CASTLE, AUTUMN RESIDENCE OF THE ROYAL FAMILY

Constructed in the years 1730-24 as memorial of the peace then recently concluded with Sweden the Slot Fredensborg stands near the eastern shore of Lake Lamm and next the town of Fredensborg in north-east Zealand. For most of the year it is simply a show place. In the royal suite are some rooms for the use of Alexandra, once Queen of England, and her Danish princess



KRONBORG'S GREY PILE AND MASSIVE RAMPARTS BY THE WILD WATERS OF THE SOUND

Danish Legation

About a mile north east from the historic port of Elsinore, the towers of Kronborg Castle face the northern mouth of that narrow channel between Zealand and Sweden called the Sound. This strait is only some three miles wide here, and the site must have appealed to Frederick II as a commanding one when he built it in 1574-83, even in those days of short range guns. In 1637 Christian IV completed its restoration after a fire and fortified it with ramparts and wide moats

system by which all its provinces enjoyed the same land tax and the same law. But the provinces were only left with the exercise of the capital. All provincial import duties were placed into the hands of the Crown, which used them to assist in the defence of the country in the days of the battle with the emperor.

The area of Denmark is in square miles, and the size of Southern Island the only island is three and a quarter million. There are under three quarters of a million people in Copenhagen and the emigration from Denmark is equal to about a fifth of the annual increase in population. The peninsula of Jutland which makes up so much of Denmark is largely leather-clad moorland, much of which has been determinedly planted with trees and otherwise reclaimed. There is a granite island of Bornholm away out in the Baltic which is all that remains of the Swedish territory in Danish possession.

The railways are a considerable national asset. The total of steamers, motor vessels and sailing vessels is a little over a million tons. Denmark's exports to Britain almost entirely agricultural were in 1921 31 millions against imports of 34 millions. About half the people get their living by agriculture.

The population of England and Wales is sixteen times greater than the population of Denmark, but there are almost as many men, women and children on the land in the little country as in the large one. How rural the country is



CORNER OF TONDERN'S QUAIN TOWN SQUARE

There is a lot of water in the square. Tondern is a town of 10,000. There is a lot of water in the square. There is a lot of water in the square. There is a lot of water in the square.

the visitor realizes who travels to Denmark by her most important steamship line. Of two of the largest boats one is called after a pioneer of agricultural research, the other after the chairman of the Danish Agricultural Society. The civil list and the votes of the Foreign Office for the Department of Public Works and for both Houses of Parliament are together just about the total of the vote for the Department of Agriculture. There are Danish manufactures largely of requisites for the man on the land in and out of Denmark, but the exports which are not agricultural products are not more than 10 per cent. of the total.

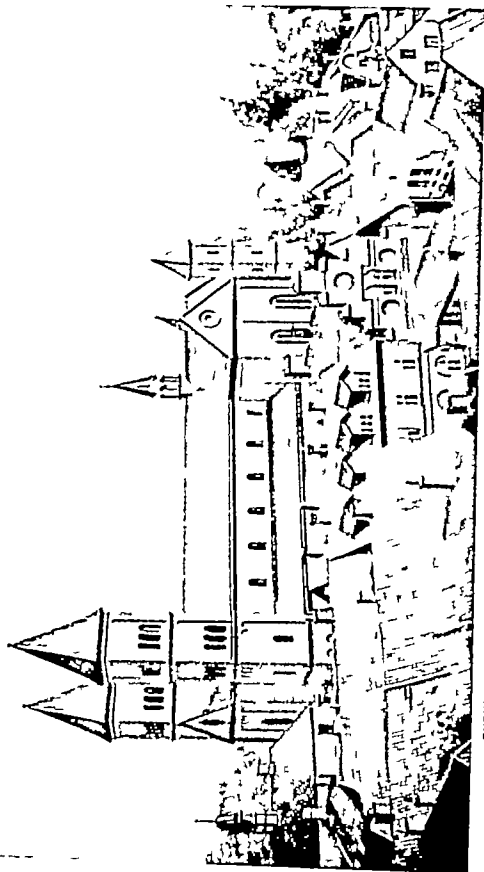
There is in Denmark what Björnson called "the most enlightened peasantry in the world." We quote "A bold



E N A

ONE OF DENMARK'S HUNDREDS OF PEASANT ESTATES, THE FOUNDATION OF THE COUNTRY'S PROSPERITY

The proportion of peasant holdings and estates has always been large in Denmark, and there has been a considerable amount of legislation to prevent these holdings changing hands from tenant to landlord. The land is worked on well thought out lines, and the increasing figures of exported dairy products testify to this. The peasant himself is second to none of any country in the world in education and status, and everywhere about the kingdom are well-kept homesteads, each with its plot of profitable land, well kept and good to look on. This estate is at Sollerod near Copenhagen.



ENDING GRANITE OF THE CATHEDRAL, PALE ABOVE THE RED RO FS OF VIBORG

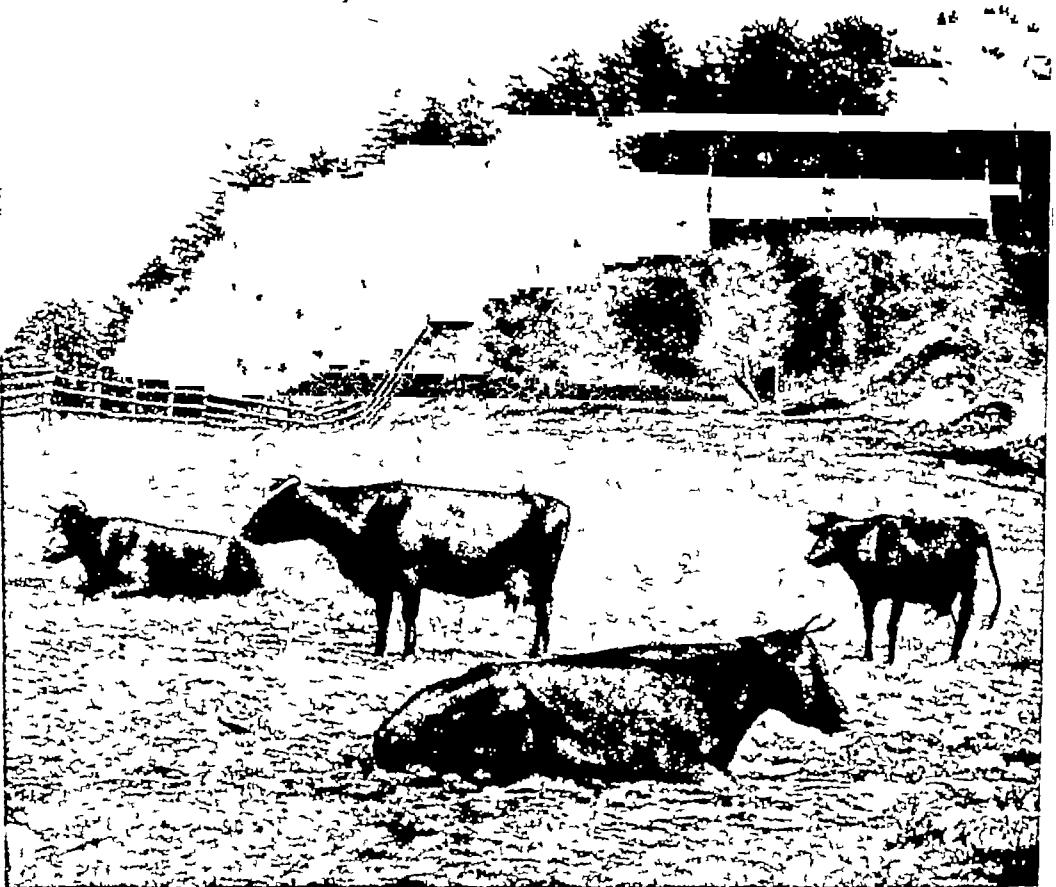
In the centre of the island of Jutland is the town of Viborg, one of the oldest and most important settlements in Denmark. It is a city of some 10,000 inhabitants, and it is one of the most beautiful cities in the country. The city is situated on a hill, and it is surrounded by a wall. The city is one of the most important centres of the country, and it is one of the most beautiful cities in the country. The city is one of the most important centres of the country, and it is one of the most beautiful cities in the country. The city is one of the most important centres of the country, and it is one of the most beautiful cities in the country.

peasantry, its country's pride," but when we do so, have we not an impression of something a little bovine and forlorn? The Danish peasants have good coats on their backs and money in their pockets, they have a nice vehicle or car to ride in, and, as a rule, the freehold of their holdings. Two members of a recent ministry were peasants. In the Cabinet of nine which succeeded it there were three peasants, and a fourth member, the prime minister, came from a peasant family. Denmark is a peasant state. Before the Great War this state (which has a Labour government) sent us nine out of every ten pounds of butter and bacon it made, and nine out of every ten eggs

its hens laid. In 1922 the export of butter alone to Great Britain was valued at nearly 14 millions sterling.

Denmark stands where she does to-day because of a wise system of land tenure, because of education and because of cooperation. A landless proletariat cannot by means of education be transformed into an active and free people. A people with such stuff in them as in the Danes must inevitably, when well settled on the land, become enlightened. The beginnings of a good land system in Denmark were laid in 1788. Compulsory education began as long ago as 1814.

What one finds in Denmark is a country in which the area of peasant



Danish Legation

SYMBOLS OF DENMARK'S GREAT DAIRY-FARMING INDUSTRY

Danish farmers have made their country preeminently an exporter of dairy products. A great part of the agriculture is devoted entirely to providing food for stock instead of human beings, and in this way they have survived depressions in the price of cereals that have injured the farming communities of other countries. Also the farm labourer is encouraged to stay on the land.



TWELFTH CENTURY CHURCH ON THE LONE ISLAND OF BORNHOLM

Bornholm, one of the few relics of the Danish empire east of Denmark, is a land of some 200 square miles in the Baltic Sea, 20 miles east of Sweden and about 100 miles south of Copenhagen. It once belonged to Sweden, and after to Sweden, then to Denmark. It is a low-lying island. The population is mostly that of a low plain. This church lies between Rønne and Nexø, the chief town.

land has been large for centuries. Whether this peasant land was let to the peasants or was owned by the peasants it was equally peasant land, the alienation of which was forbidden by custom and law. The Danish kings coped with the power of the privileged classes and the clergy by relying on peasant sympathy and taxes.

As far back as the fourteenth century it was made illegal to buy land from the peasant freeholder. Four hundred years ago it became the law that land should be let for the whole lifetime of the peasant. Although there was an ingoing to pay on taking a holding the rent remained the same for generations. A century later it was enacted that the widow of a tenant should keep possession of her husband's farm whether she married or not. This is still the Danish law. A further custom that the son should have a claim to rent his parents' holding was usually obeyed. From the same time dates the law

forbidding the merging of peasant farms in estates.

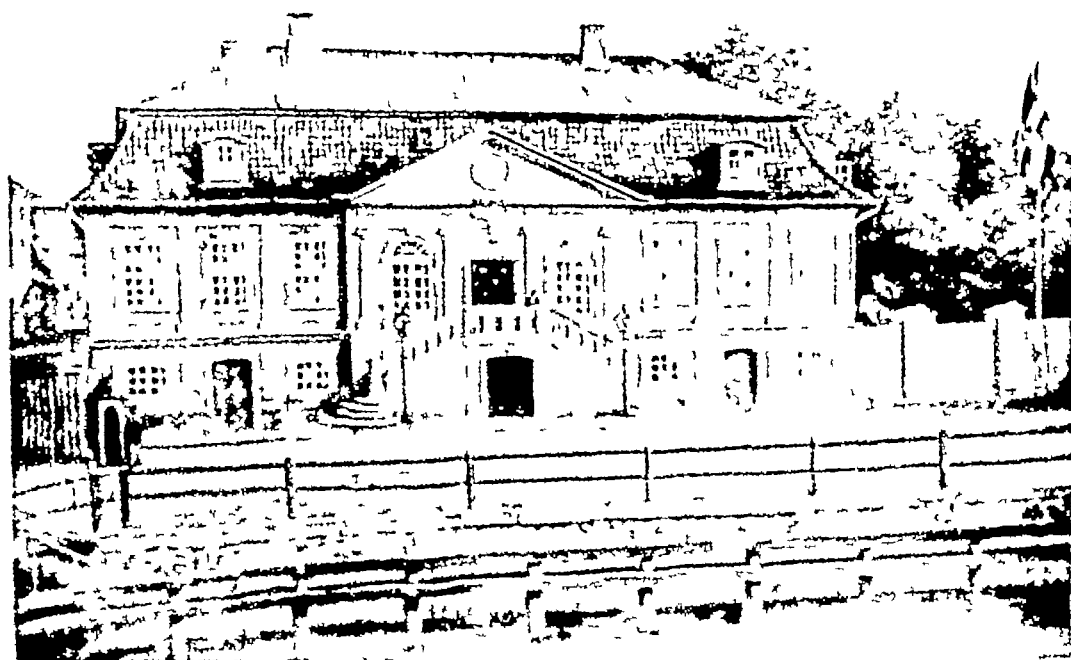
During the period when English common land was being enclosed by the wealthy Danish common land was being apportioned among the peasants. At the time that Robert Burns, peasant and poet at his wit's end for money, was thinking of emigrating the Danish state was offering peasants loans at 2 per cent in order that they might be able to buy their farms. It became the law that a peasant could not be evicted without the decision of a magistrate. Wrecked as the country was by the Napoleonic wars it possessed an element of stability in the fact that a quarter of the peasants owned the land they cultivated.

A series of acts has encouraged large landowners to sell land to peasants. It has long been the law that a man buying an additional holding must have a farmhouse and a family on this off farm. Farmers have been fined for



STATUE OF HANS ANDERSEN IN OLD ODENSE

Odense is the capital of Funen island and near the river of that name. It has an eleventh century cathedral and an excellent system of electrical street lighting, manufactures chemicals and cloth, and was the birthplace of Hans Andersen. The house in which this event took place is now a museum and the proud inhabitants of the city have set up an effigy of this pioneer in fairyland.



OLD CUSTOMS HOUSE OF FAJOZ, ELSINORE

living on one farm with their milking cattle and using another to run young stock on. A law of 1899 set aside a sum equal to the king's civil list to provide loans for agricultural labourers who wanted to obtain holdings.

And the result? Danish farms—we may say roughly that they are about two-third the size of British farms—are mainly freehold. Not more than a thirteenth of the cultivated area of the country is composed of large estates.

country depends less on its natural resources than on the quality of the labour applied to its development and on the intelligence that directs the labour." The head of the oldest agricultural experimental station in the world Rothamsted in England has called the history of Danish agriculture from the sixties entrancing. Up to the sixties Danish and British agriculture had moved somewhat on similar lines. The Danish farmer and the



PEACE AND CHARM IN A CORNER OF RURAL FAABORG

Danish Legation

A peculiarity of Denmark is the fact that its islands are almost of more importance than its main land. Copenhagen the capital is on an island; Zealand; and the next island in point of size is Funen. One of its most picturesque towns is Faaborg, in the corner of which are these old half-timbered houses—the right-hand one houses an apothecary.

There are not more than 900 holdings of more than 350 acres. If we reckon small holdings as areas up to about 25 acres—a common British notion of a small holding is three acres and a cow—then a seventh of the cultivated area is small holdings. Taking the total number of agricultural holdings 90 per cent is freehold compared to the British 73 per cent.

A very distinguished historian has written that the prosperity of a

British farmer had combined corn production and live-stock. But the British farmer then decided to bank on meat production. The Dane went in for dairying. Events have shown says Sir John Russell "that it was emphatically the right choice.

Dairy farming produces much more food pro rata than meat production and it allows full scope for—indeed it necessitates—those cooperative methods of business and production

which have since dominated Danish agriculture. "The wisdom of the Danish choice," he goes on, "was evident in the 'eighties and 'nineties when Europe was flooded with cheap agricultural produce from the virgin countries of the New World and Australasia. Wheat fell to nearly half the price. English agriculture suffered a terrible set-back and did not begin to recover until about 1896. Danish agriculture, on the other hand, was able to make headway all the time. The improvement in dairying reacted on arable farming: the export of butter rose from 10,000 tons per annum in the late 'seventies to 100,000 tons before the Great War, and the yield of wheat rose from 30.9 to 36.5 bushels per acre. Thus the Danish system has proved to be eminently suitable for the production of wheat from the land, and herein lies the great importance of its lesson for us."

Effects of Falling Wheat Prices

The fall in the price of corn, due to cheap production abroad, by which the working classes of Great Britain, Holland and Denmark—the three countries which have no duties on agricultural produce—have so much benefited was differently met by the British and the Danish farmer. The British farmer tried to balance accounts by saving labour. Because fewer hands are needed to mind cattle than to grow crops, he proceeded to devote areas of ploughed land to grass. On his grass he tried to carry as many cattle and sheep as possible. On his remaining arable land he went on steadily growing corn.

How Danish Farmers Met the Crisis

The Dane did just the opposite. He kept all the labour he could on his land. He ploughed up grass and got rid of sheep. He was minded to market, not a raw material like corn, but finished articles. He would make his farm a factory in which to produce milk for butter and pigs for bacon. If he grew corn it should be fed at first cost to his stock. He would also grow for his

cattle and pigs large quantities of roots and green fodder. This provender he would supplement by buying foreign corn, foreign bran and foreign cake. And because he wanted these foreign products at the lowest possible price, he took care that there should be no duties on them at his ports.

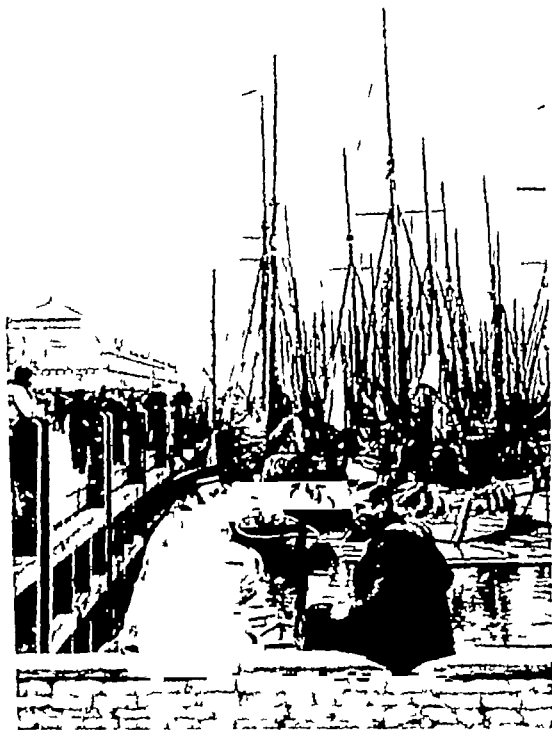
To-day the problem for the Danish farmer is not at all whether it pays to grow corn for sale at present prices. Such an inquiry seems to him the mark of an unprogressive farming outlook. He is intent, not on selling off his crops, but on feeding them as fast as he can to his stock and in buying in as much more food as he can. Denmark, from being a grain exporter, has become a grain importer. The corn and other produce which she imports are turned into butter and bacon and eggs, which are exported at prices which could never have been got for the raw material. With regard to the amount of labour kept on the land, there is not only what Denmark can produce herself, but an annual importation of several thousand Polish and Galician farm workers.

Success of Cooperative Enterprise

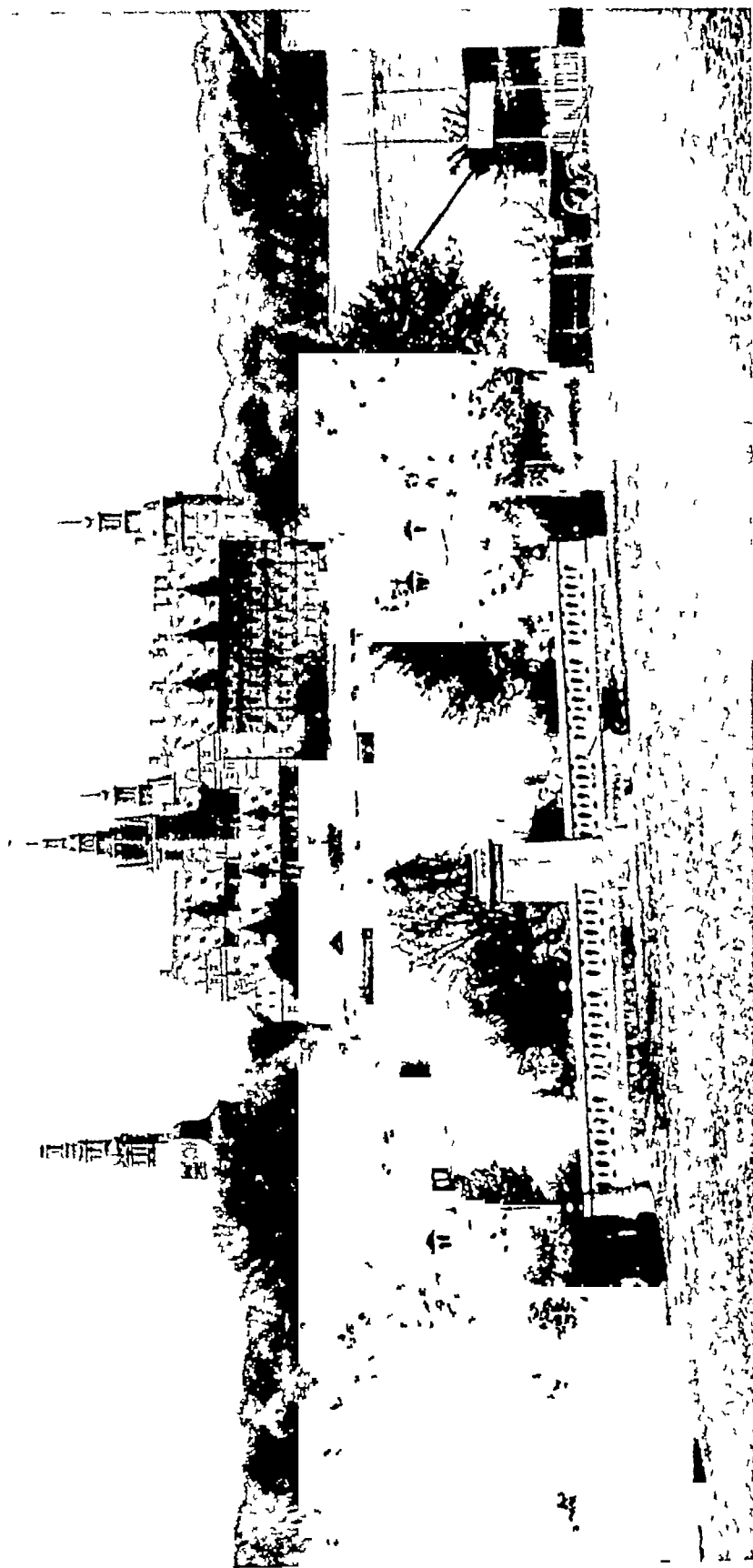
Again, six-sevenths of the bacon made in Denmark come from cooperative factories. Denmark is a network of cooperative societies. A Danish farmer thinks nothing of belonging to a dozen of them on the sound one-society-one-job principle. The meetings a Danish farmer has to attend, for which he is often chaffed, give him self-confidence, a knowledge of business, a sense of responsibility and the habit of rendering public service.

The remarkable thing about the farmers' cooperative enterprises is that the vast capital involved is not the farmers'. It has been readily advanced by the banks on the joint responsibility of the members. This is the great secret of agricultural cooperation.

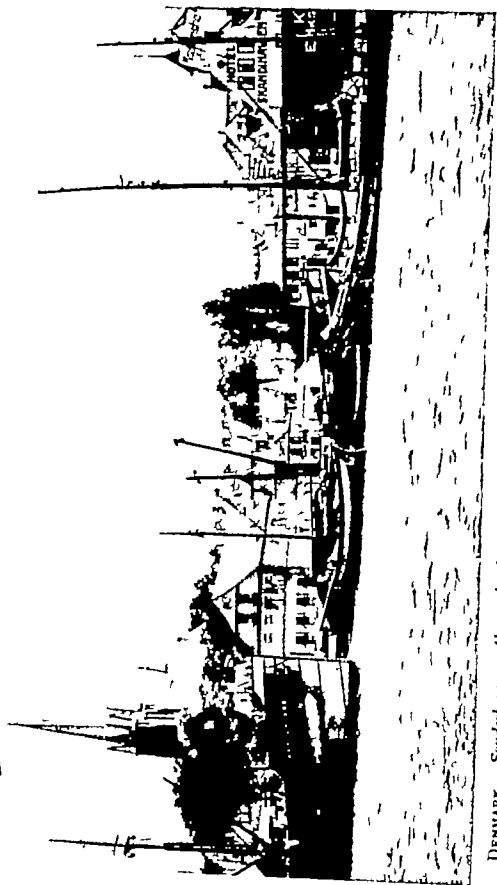
The existence of the butter factories or creameries, which give the farmer back his milk after the cream has been separated from it, makes possible the



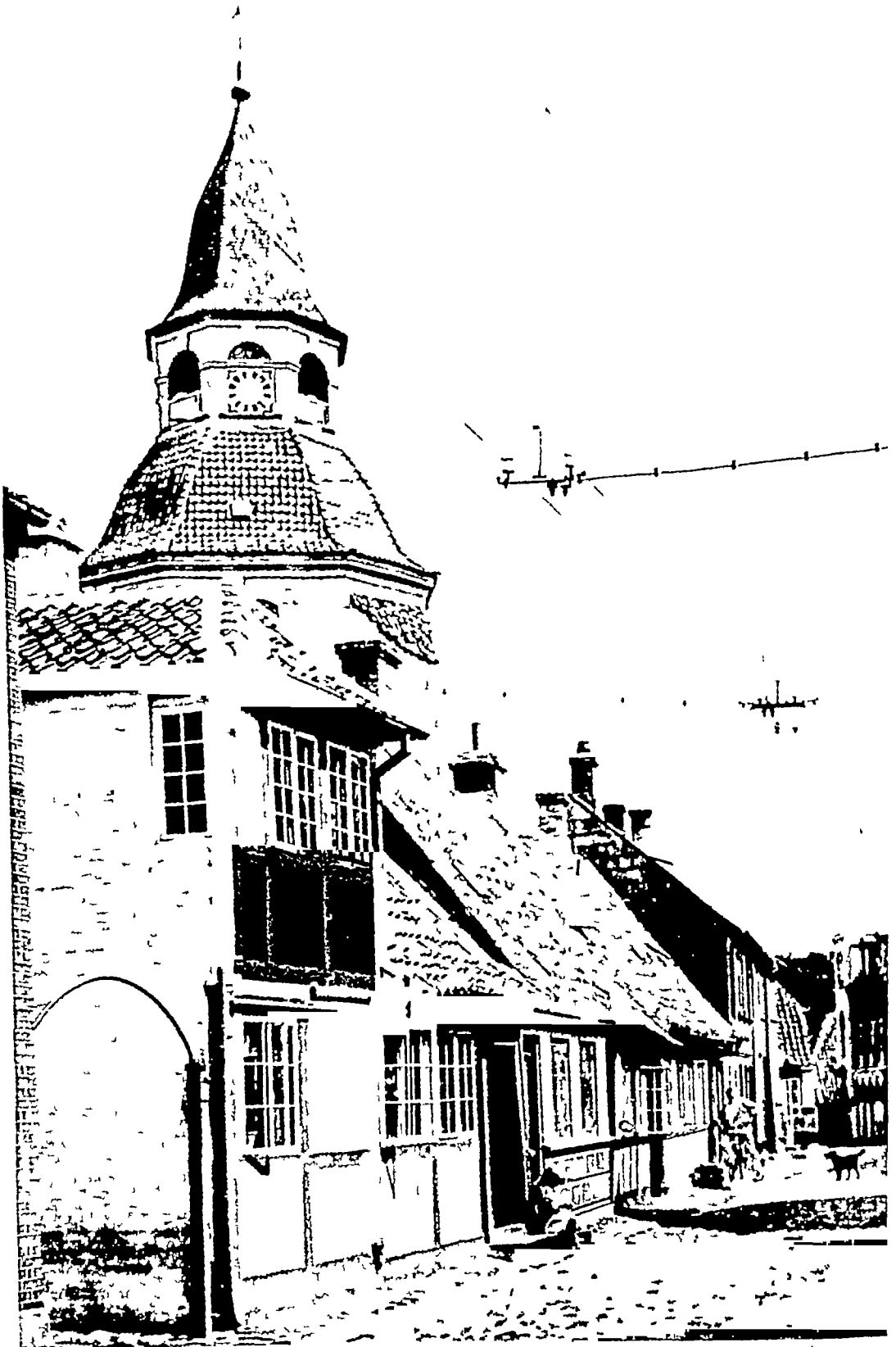
DENMARK *Esbjerg has been developed from a village to an enterprising seaport mainly on account of the trade with England*



DENMARK Fredericksborg Castle stands on an island in one of the Zealand lakes It was built by Christian IV
in the seventeenth century as a royal palace and is now used as a national historical museum



DENMARK Sønderborg on Alsens island in north Slesvig was annexed by Germany in the year of 1864 and incidentally burnt but restored in 1920 It has a fine harbour and prospers in shipping and fishing



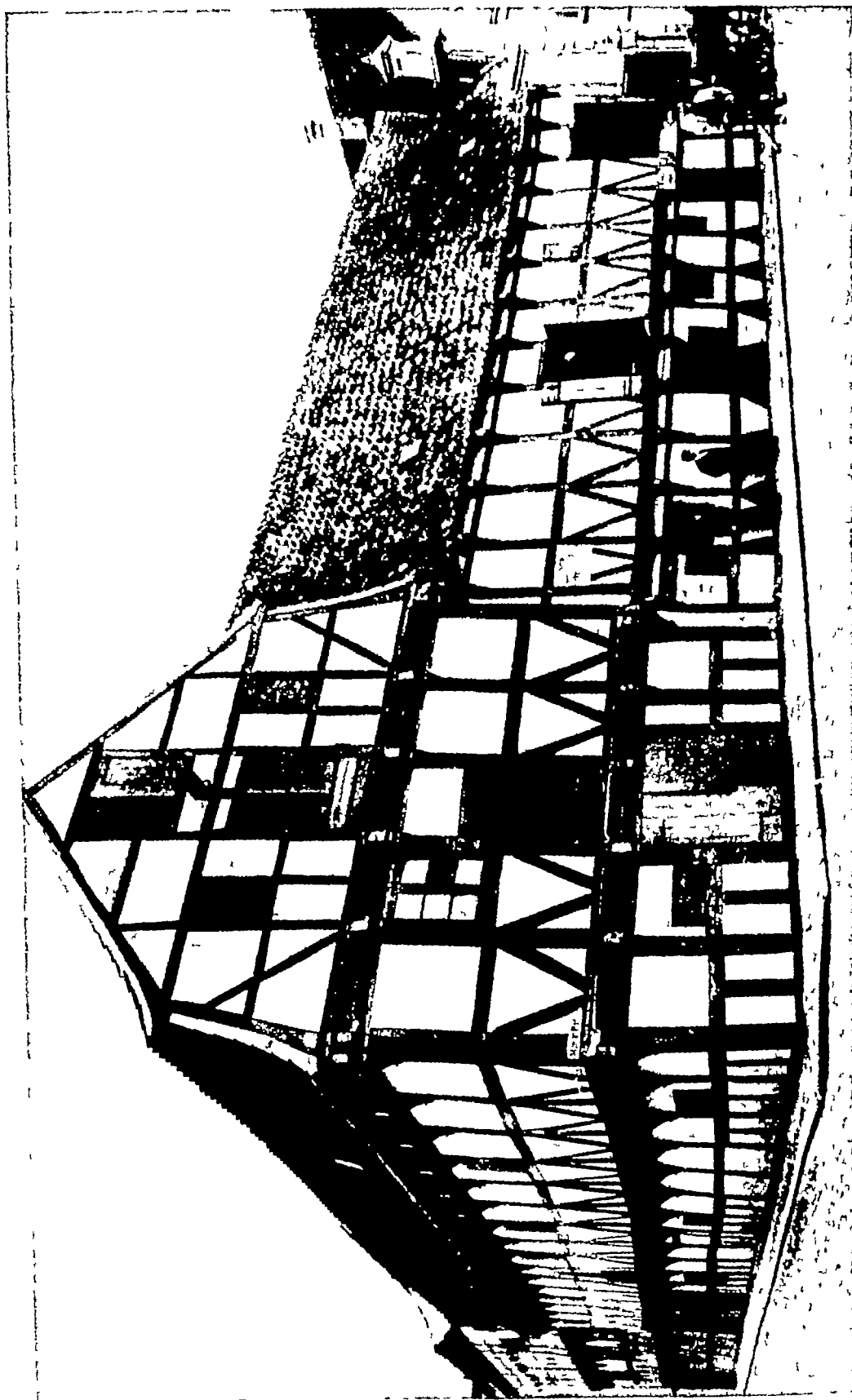
Danish Legation

DENMARK *This is the belfry of Faaborg, a seaport on the fjord of that name on the south-western shores of the isle of Funen*



DENMARK This quaint house on Vloen is a hunting box. It is recorded that the island was as late as 1100 three separate islets

1641



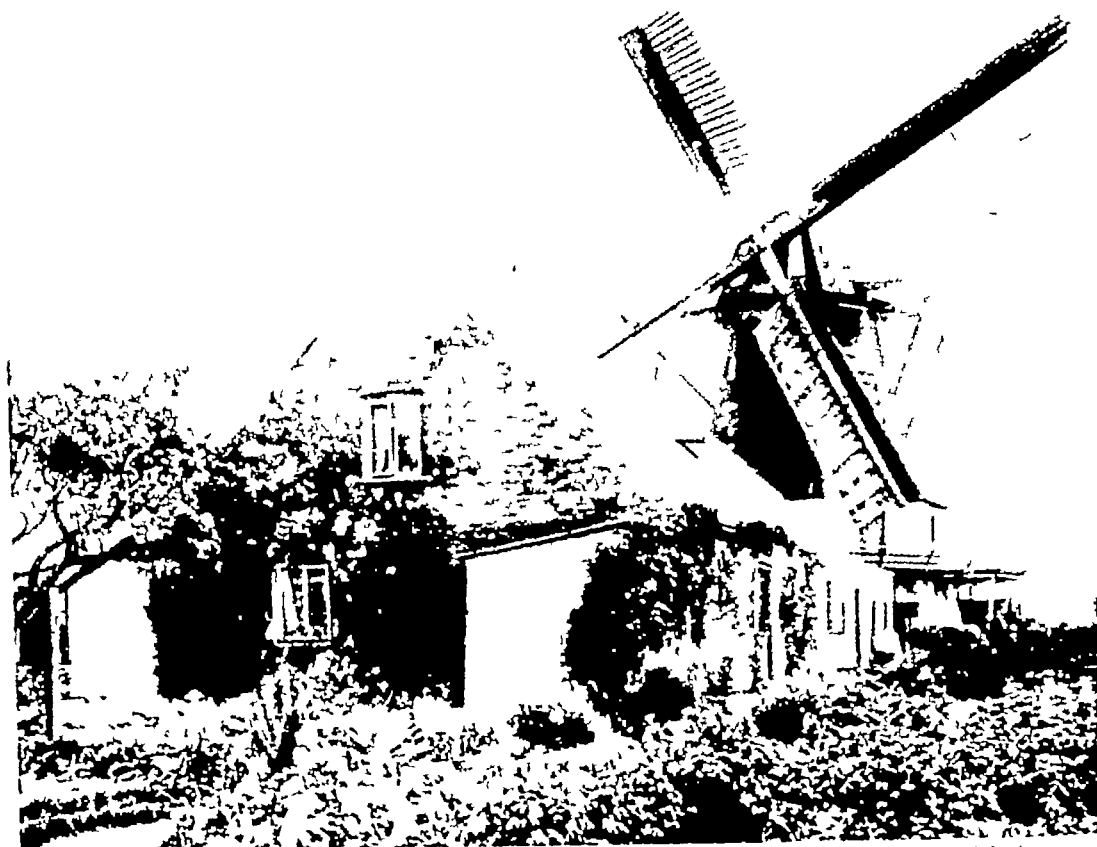
DENMARK Mórups Plads at Aalborg is beautified by this old timbered warehouse The port is on Limfjord
and, besides being a prosperous trade centre, is the seat of a bishop Aalborg means "eel castle"

Danish Legation



Danish Capital

DENMARK Founded in 1074 and reconstructed in the twelfth century the fine cathedral of Roskilde contains the dust of many Danish kings The town is built on a fjord twenty miles from Copenhagen



Slesvig, especially along the west coast, resembles its neighbour Holland with its low-lying ground drained by means of dykes and windmills



DENMARK *The rich marshlands of west Slesvig produce fine crops, and mechanical threshers denote the up-to-date agricultural methods*

enactment that non-pasteurised milk shall not be given to a young pig and calves. Having to be killed, Danish exports they must be protected from tuberculous. Similarly no butter may be exported from Denmark which is not made from pasteurised cream. A very lot of butter which is exported bears a government stamp. The State pays out money fully in aid of a agriculturist effort but monetary help has been given in a discreet way. There has been no coercion.

It was because of their excellent general education that the Danish peasants were particularly helped to avail themselves of technical instruction and to develop co-operation. That excellent general education is due in part to the famous rural "folkehøjskole" (high school) which trains them, lives that they teach nothing out of which a living may be made, and that they do not send their pupils at the end of their studies to the towns. These frugally equipped schools or colleges, to which young men and women flock in winter, concern themselves with history music, foreign countries, art, the lives of great men of all times and physical exercise.

Livestock and Cross Land

Reverting to agricultural conditions, only a seventh of the cultivated area is under permanent grass. The number of live-stock kept is very large. In the first year of the Great War there were 3,600,000 animals—2,500,000 cattle, 567,000 horses, 515,000 sheep—and 15,000,000 fowls on nine million acres. Cereals covered in 1912 2,800,000 acres, grass and green crops 1,990,000 acres, roots 1,000,000 acres, other crops 190,000 acres, meadow 859,000 acres, and fallow 341,000 acres.

In the period 1876-1880 Denmark had an import surplus (that is imports less exports) of £2,023,000 worth of corn, flour, meat, feeding stuffs and seed. In the period 1910-1913 she had a surplus import of as much as £9,368,000, while her surplus

export of animal produce had risen from £143,000 to £1,519,000 worth. There could not be a clearer picture of the change in agricultural practice which has taken place. It may be added that the export of butter increased more than six times, of lard and tallow more than sixteen times, and of eggs about eight times between the 1881-85 and the 1912-15 periods.

Increases of Yield from the Land

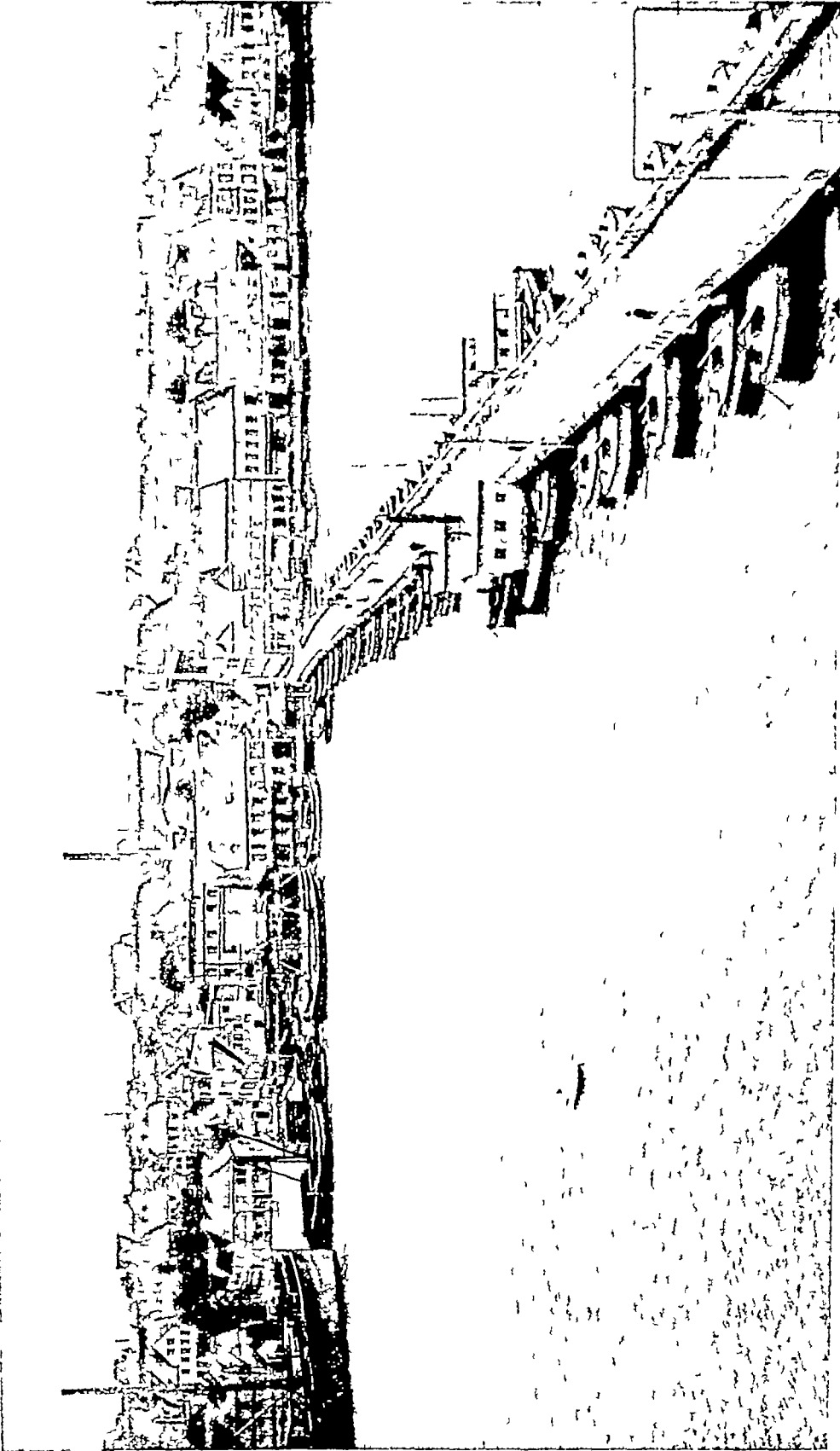
The average wheat crop rose from 1.554 and 1.609 13 from 4 to 4.5 bushels. It is now 4.7 bushels again. As well in England and Wales in 1914 32 bushels. Barley rose from 5.1 bushels to 5.1 bushels. It is now 5.1 bushels which used to be 4.5 tons per acre were 5.1 and more, which had been 4.1 were 1.5 and much more largely dry matter in leaf and water than many old varieties. Briefly, the total produce of crops has increased in twenty years by 25 per cent.

The number of cattle was doubled and the number of swine was increased five times. The yield of butter per cow rose from 116 pounds per cow in 1887 to 200 pounds in 1905, the yield of milk from 510 gallons in 1904 to 551 gallons in 1912. For all Danish farms which sent in reports to the Royal Danish Agricultural Society there was an average net profit of 8.6 per cent in 1920-21 and of 12.1 per cent in 1921-2.

High Wage Standard of Work

The notion that Danish agriculture succeeded on a basis of poorly paid labour is inaccurate. The wages of labourers in 1921 averaged 2.793 kroner a year, there being about 24 kroner to the pound. Nor is the land skimmed for labour. On a typical farm of 100 acres the labour was three men and a married stockman and his wife, one maid to help with the milking, and two labourers for six months.

It is symptomatic of the social condition of rural Denmark that so much of it is electrically lighted. In addition to the service of the big central



HISTORIC PONTOON BRIDGE OF SONDERBORG, SCENE OF A GREAT RETREAT BY THE DANISH ARMY

The famous bridge of boats at Sonderborg connects the town and the island of Als, on which it stands, with the mainland. It will be for ever associated with the war between Prussia and Denmark in 1864, for the Danish troops retired across it on to the island and, having set fire to it, cut the moorings and let it swing out into the channel. When restored the old construction was adhered to, but Sonderborg remained in German hands as a part of Schleswig Holstein and a garrison town and naval station till 1920, when it was returned to Denmark and the Danish province of Slesvig.

power stations there are 250 cooperative electricity societies. Many farms are not only lighted by electricity but are having their threshing and grinding done by electricity. "The Danes seem averse to innovation," wrote Mary Wollstonecraft, which only shows how a nation may be misjudged.

In dwelling on the agricultural advance a word should be spared for the advance in forestry. Nearly 3,000 miles of heath land, marshes, etc., have been transformed into forest or farm-land. Sixty years ago there were 200 square miles of forest in Jutland, now there are as many as 700.

Those who visit the Danish farmers are impressed by their hospitality, by the rows of books and pictures in their houses, and by the number of papers to which they subscribe. There is a general air of well being and of intelligence throughout the country. Denmark is intensely democratic.

"The brothers of Englishmen, the Danes," was Nelson's phrase. But there are all sorts of odd differences. For example, and at random, the incessant coffee drinking, parsons in their ruffs, the family doctors with their annual salaries, the more northern architecture—one feels vaguely that one is in Scandinavia and that Russia is not far away. One notices such things as Hamlet without the aspirate, the storks, the habit of singing, and the plates of "smørrebrød" (sandwiches of a dozen sorts) available at every inn and restaurant. After dinner one still finds

the guests shaking hands with one another and their hosts, and saying "Velbekomme" ("May it agree with you"), or "Tak for mad" ("Thank you for food").

Every visitor to Denmark will want to go to Elsinore (Helsingør)—he can be accommodated with a sight of the tomb of Hamlet, to Roskilde, the burial-place of the Danish kings, to the castles of Frederiksborg and Kronborg, and to the open-air museum at Lyngby, where so much of old-time rural Denmark is preserved with remarkable skill. There is to be found there a farm-house from Slesvig (from which region many of the English people came), which was originally built nearly three centuries ago. It helps one to realize how our forefathers lived.

In his journeys by boat and train the stranger can hardly fail to see something of the moors and fjords as well as the wonderful meadows and cultivated fields of Denmark. But it is well worth while to break the journey at Esbjerg, the usual port of entry, and make a special tour, instead of hurrying on with the crowd by night express to Copenhagen. Jutland—the resemblance between Jutlanders and Yorkshire folk has often been stressed—has not only old-world Fano and Ribe to show, and Askov with one of the most famous people's high schools, and the fjord towns out east, but the runic stones at Yelling, in honour of the great-grandparents of Canute and bearing on it a primitive picture of Christ.

DENMARK GEOGRAPHICAL SUMMARY

Natural Division. Peninsular and insular portion of the Great European plain (Cf. South Sweden, North Germany, Holland). A lowland, a gentle surface-swelling across the natural connexion between the North and Baltic Seas.

Climate and Vegetation. Naturally heath and moorland (Cf. North Germany) much has been afforested. As dry as East Anglia, as cold in winter as the Scottish uplands, and as bleak and wind-swept. In summer as warm as Southern England, with longer days due to its situation in a higher latitude.

Resources and Products. Limited in resources to the produce of the soil. Denmark's chief products are manufactured farm produce, chiefly butter and bacon. The people outside Copenhagen are a rural folk, most of whom occupy small holdings, for the peasant has more definite rights to a share in the land than elsewhere in the world. By dint of co-operation they have become a dairying people "par excellence."

Outlook. Denmark will prosper as a provider of provisions to the industrial areas of Western Europe.

DOBRUJA

Drab Land of Desolation and Promise

by Florence Harborough, F.R.C.S.

Traveler, Explorer & Authority on Modern Europe

THE Dobruja, the south-eastern portion of Rumania, is the largest tract of land stretching in a northerly direction from the Eastern Rilian range in Bulgaria to the delta of the Danube, flanked on the west by the great waterway of the Danube itself, on the east by the Black Sea. Thus the Dobruja should constitute a complete geographical entity, since nature has provided on all sides its natural and clearly-defined boundaries: mountainous, riverine and coastal.

In the south, however, the recognized boundary which establishes the Dobruja as a political unit is not a natural but a conventional one, and runs from the Danube some ten miles west of Turtucaia to the Black Sea some ten miles north of the Bulgarian port of Varna. This conventional frontier was fixed in accordance with the terms of the Treaty of Bukarest, signed in 1913 on the conclusion of the second Balkan War. Prior to that time the boundary line had been drawn from the Danube east of Silistria to the Black Sea a few miles south of Mangalia; that is to say, at an average distance of about thirty miles north of the present frontier.

Broad River-bounded Oblong

In shape this broad passage is an irregular oblong, or as it has been humorously described "an oblong with a waist." For from Turtucaia the Danube flows persistently in an easterly direction as though impatient to reach the sea, then near Carnavoda—where a railway stretches like a girdle from river to coast across a well marked natural depression—less than forty miles distant from the slightly indented shore it suddenly turns westwards and, with

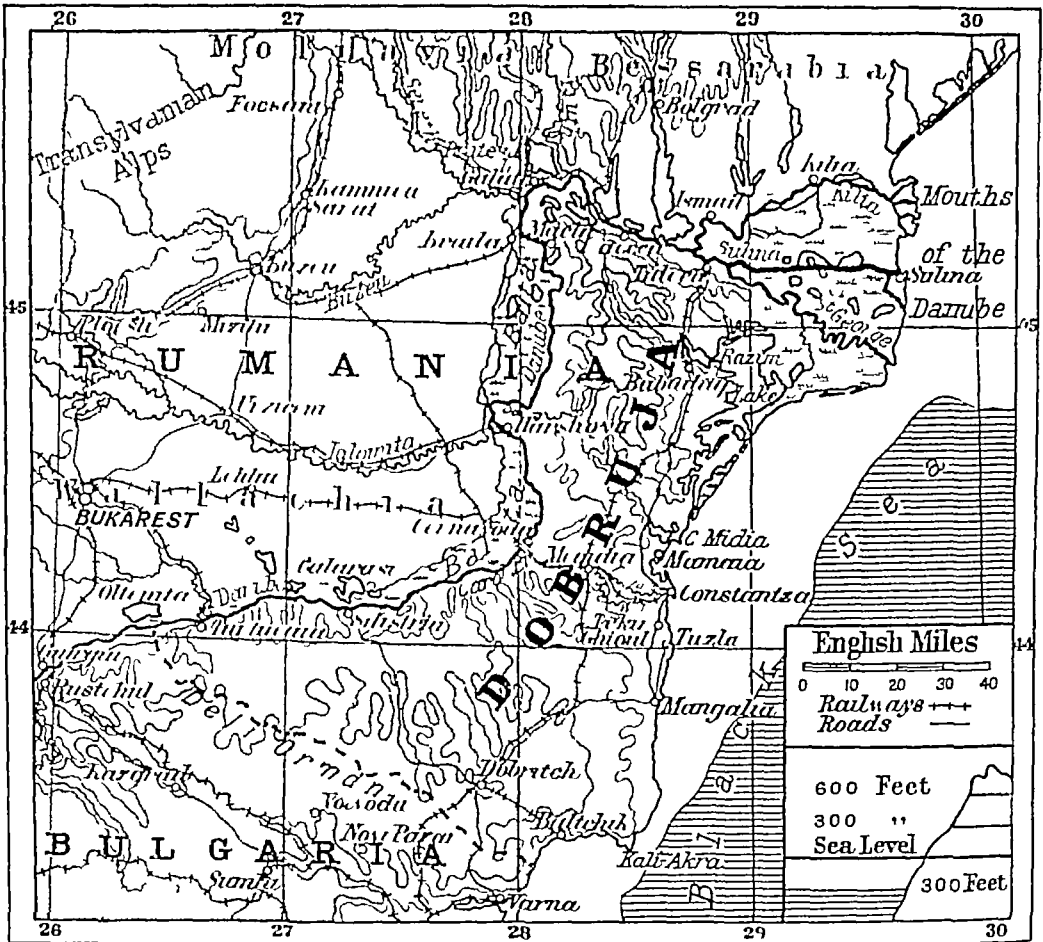
the exception of a broad horseshoe bend near Harshova, continues its capricious course towards the north, until finally, with a strong curve at Calaitz, it swings again to the east, split into several channels and winds onward to the sea.

With the exception of a well marked protrusion at the mouth of the Danube, the coastline of eastern Rumania is low and on the whole fairly straight and monotonous, but much broken in the north where the sea penetrates far into the land, fashioning for itself creeks and lagoons of some considerable size.

Muddy Delta of the Danube

The delta constitutes the northern boundary. Here are the three mouths: Kilia, Sulina and St. George, spread out in fan fashion over a wide expanse of alluvial mud, only small portions of which are sufficiently table to furnish ground suitable for man's habitation and such cultivation as exists is found only in the vicinity of the few scattered villages. The delta covers an area of about 1,000 square miles and along the coast between the mouth of Kilia and that of St. George measures forty miles. Dunes of varying height have established themselves round the Kilia mouth elsewhere throughout the whole delta the land is low and marshy, being only two feet above sea-level about the mouth of Sulina, that arm of the Danube which bisects the delta, while in some parts it is actually below sea level.

Fresh-water lakes fed by these branching mouths of the great river are numerous but made indistinguishable from the swamps by periodical floods to which the entire area is liable. It is estimated, nevertheless, that the delta gains annually from ten to fifteen feet



DOBRUJA, LOW HOGSBACK BETWEEN DANUBE AND SEA

towards the sea, and is slowly but surely becoming more and more consolidated

The natural boundary on the south may be said to be formed by the Deli Orman, or "Wild Wood"—a region of bleak and barren highlands stretching across north-east Bulgaria, almost parallel to the Rustchuk-Varna railroad. Their highest point, 1,624 feet, is near Voivoda, a village situated some nine miles north-west of Novi Pazai.

From the foothills of this Balkan range, north of Varna, a plain breaks away in a series of gentle undulations with a slight fall towards the Danube delta. This plain, known as the Dobruja, may be divided roughly into four regions. There is first the plateau, including much steppe-land found in the south and centre, then, the rugged hilly country of the north-west,

next, the marsh-lands where broad lagoons monopolise large tracts in the east, and last, the delta of the Danube with its numerous waterways, lakes and broad strips of reed and alder-beds, as well as wide mud-flats and extensive alluvial deposits.

The most fertile district is found on the plateau of the south. Here corn is produced in considerable quantities and agriculture forms the main occupation of the inhabitants. The undulations of this district, stretching roughly from the Deli Orman in a north-easterly direction towards Megidia, are not strongly accentuated, and run from about 800 feet to below 500. Megidia itself, though part of the plateau, belongs to a less fertile district and may be considered as actual steppe-land covered with a calcareous loam. Beyond, the

country continues its general character of a bare plateau with little or no variety of relief until the broken hilly district of the north-west is reached. This district extending from Balahadag or "Old Mother" towards Macin consists of well-wooded heights some of them rising to 1000 feet and more.

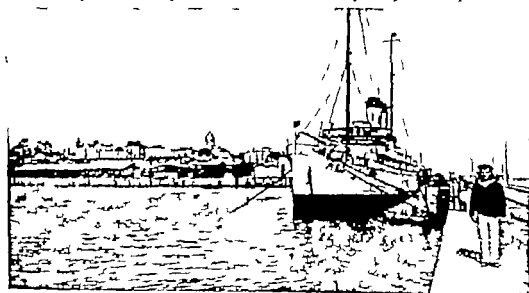
The Dobruja in Rumanian "Dobrogea" in Bulgarian "Dobrich" came first into prominence in 1878 at the close of the Russo-Turkish War when Russia annexed the fertile Bessarabia a possession of Rumania and then made a pretence of compensating her indignant ally by a signing to her the delta of the Danube together with the sandy belt below it extending to the Bulgarian frontier. But long before the nineteenth century the Dobruja had played a part though mainly a passive one in the annals of Balkan history.

From the earliest times indeed this had been a debatable land. Northern races intent on despoiling Constantinople and the wealthy cities of the eastern provinces of the Roman Empire came streaming across its barren plains. Goths Slavs Tartars and yet other invaders used it as a high road to fortune—not always successfully however.

In Trajan's Wall there exists to this day a mute reminder of at least one stupendous obstacle which these heathen hordes had to encounter. The Emperor Trajan was quick to recognize the strategic importance of the trans-Danubian territory of Dacia which he had subjugated and about A.D. 106 he raised between Constantza on the Black Sea and the Danube a great defensive rampart made up of triple barriers deep entrenchments ten to twenty feet in width with fortified camps, of which fragments still remain sufficient to bear witness to the ingenuity and immutable military skill of the great Roman warrior.

Southwards too over this lone bare land the Russian passed in 1812 to fight for their Bulgarian kinsmen against the Turk and her in 1916 swarmed the allied forces of Germany and Bulgaria under Mackensen—an invasion that resulted in the evacuation of the Dobruja by the Rumanians.

The Dobruja has a singularly varied fauna and flora. The wolf and the wild boar exist in some districts also the lynx wild ox and deer. The fox wild cat badger hedgehog and polecat are common especially in the plains and



CONSTANTZA THE PEARL OF THE BLACK SEA

Curios Reminiscences

The present name Constantza, formerly Constantiana, is said to be derived from Constantine the Great, under whose rule the town enjoyed much prosperity. Under the Turks, however, its fortunes declined, and it was little more than a fishing village with some 5,000 inhabitants when the Dobruja was annexed to Rumania in 1878. Since then Constantza has made remarkable progress.



Cultura Nationala

GENERAL VIEW OF CONSTANTZA, THE NATIONAL PORT OF ROMANIA ON THE BLACK SEA

Constantza lies on the Black Sea, 140 miles east of Bukarest by rail. Despite its modern appearance, the town has many early historical associations, the statue of Ovid in the square brings to mind the antiquity of the site as a town, and fragments of the Great Wall of Trajan, at the seaward end of which Constantza lies, still stand to bear witness to its strategical importance. The clean and attractive streets are flanked by many fine buildings, including mosques and churches, while among modern structures the new Casino—its facade is seen to the left of the central background—proves a great attraction to the numerous visitors

here too are found the most characteristic forms of bird life, such as the little and great bustard, partridge, quail and the calandra. In the higher forested regions the eagle and the vulture have their habitat but feathered fowl are most abundant in the swamp-lands of the Danube valley where wild duck and goose, stork and heron, pelican, coot, plover, sandpiper, kingfisher and

The Danube teems with fish including salmon, sturgeon, pike and many other kinds. Several peasant communities are exclusively engaged in the fisheries which prove fairly lucrative. Large quantities of fish are caught during the periods of flood and in the year 1907 when the river rose nearly 20 feet it is recorded that over thirteen million pounds were caught in the delta.



GIANT GRAIN ELEVATORS IN THE DOBRUJA'S FAMOUS ICE FREE PORT

Since Constantza, Rumania's only port of importance on the Black Sea, was linked with Bukarest, the capital of the kingdom, by direct railway crossing the Danube the town's prosperity has vastly increased. Numerous grain elevators and warehouses, petroleum tanks and refineries have been established on the wharves, for the transit trade of grain and petroleum is enormous.

swallow may be enumerated among an astonishing variety.

In the marshes of the delta the chief enemy of animate existence is the water which swells suddenly and sweeps over the lowlands swallowing up everything in its course. Safe from man's craft and cunning, animal life is prolific in these forsaken regions but year by year the treacherous floods exact their toll and many creatures perish while such as do escape—a motley collection of fur and feather—eke out a desperate existence on floating islands of plover or marsh weeds, so thickly matted and intertwined as to furnish a secure footing for both man and beast or on the spreading branches of the numberless willow trees, until the fury of the waters has at last abated.

The flora of the central Dobruja steppe is not unlike that of the Wallachian plain. Few trees are seen the conditions are too adverse for their growth—frequent storms of dust in summer, glacial blasts in winter and the scarcity of rain and of running water. Farther north however on the hilly tableland of Babadag, woods in which oak and beech predominate are found in plenty. In the south vegetation is rich and varied though streams are rare but subterranean water is not lacking and wells abound. Along the course of the Danube the monotonous steppe-land again prevails, reeds and thick grasses grow to a great height and willows are so dense that the outline of the landscape is often completely hidden from view.



PANORAMA OF TULCEA ON THE DANUBE, ONE OF THE MOST IMPORTANT TOWNS IN THE DOBRUJA
A thriving river port, Tulcea is situated near the western fringe of the Danubian delta in north Dobruja 30 miles almost due east from Braila. It is a commercial centre and the collecting and distributing point for the varied produce of the rich district lying south of the delta. Eastwards of the point the town whose scattered buildings—chiefly low white houses with red tiled roofs peering through masses of greenery—house a population estimated at 15,000, the Danube divides to form the Sulina and the St George branches, their tortuous courses winding for miles through waterways of an indescribable character.

Northwards in and about the delta the flora becomes more varied. Reeds, weeds, grasses and tinted brul flourish abundantly. In the late spring and early summer months the marshes present one vast expanse of water, but the late summer find the waters rapidly receding and verdant hillsides and rich patches of land emerge from the lagoon, pecked luxuriantly with grasses and flowers of brilliant coloring—an almost

The New Dobruja, the part ceded to Rumania by Bulgaria in 1913, is the most productive district in spite of some scarcity of water. In the vicinity of Constantza cultivation has spread over a considerable area, but without important results, while the waterless *steppe* below the northern marshes is given over mainly to pasturage. Here at the grazing ground of large numbers of sheep and cattle tended by rough



CAROL BRIDGE A REMARKABLE TRIUMPH OF ENGINEERING SKILL

Named for Rumania's late king the famous Carol Bridge over the Danube (Cerna) is completed 2,535 ft. for commercial and passenger use. The actual bridge spanning the main stream is 75 yards long, and over 100 feet above the river but the total (including approach and smaller bridges necessary for crossing the surrounding marshes, etc.) total length of 2,535 miles.

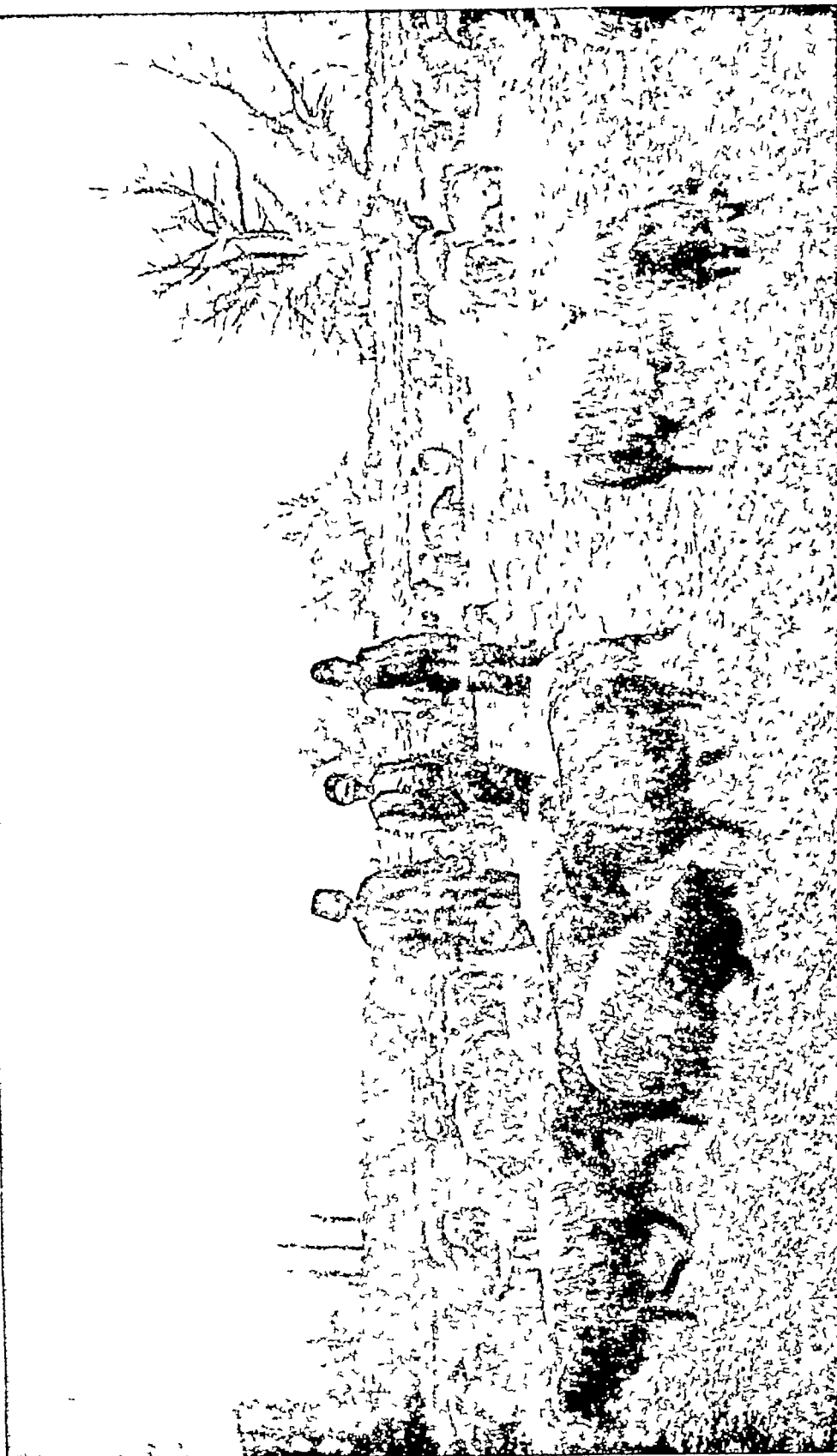
miraculous transformation from watery wastes to flower-strewn fields.

Minerals have not yet been exploited sufficiently to give any settled economic value to the Dobruja. Here and there marble and granite occur—some of the best granite is found in the quarries at Macin and Isaccea—and deposits of hematite have been reported from the Tulcea district. It was in this district that copper deposits including those of copper pyrites, were beginning to attract attention when the Great War convulsed the country. Coal is another mineral in which the territory is undoubtedly rich, but this valuable industry is still undeveloped.

Where agriculture is concerned only the southern part of the country can be relied upon to produce good crops.

wild-eyed shepherds who in shaggy-tressed sheepskins with fierce dogs as their companions brave the silence and loneliness of these bleak wind-swept regions. But the brown-brigand-like shepherd with the breath about him of the plains and mountains is best represented by the Transylvanian pastors known as *Mocani* who since remote times have descended with their flocks to these pasture-grounds for a certain period of the year—the migration back to the highlands of Transylvania usually beginning towards the end of April. Apart from stock farming there are certain plots in this northern district where wine, fruit and tobacco are cultivated.

The chief value of the Dobruja to Rumania lies in Constantza, or



E Y A

PASTORAL SCENE SHOWING MIGRATORY SHEPHERDS ON A BLEAK NORTHERN LANDSCAPE OF THE DOBRUJA

In certain parts of the Dobruja, particularly in the Tulcea district, stock farming, especially with sheep, is carried on successfully on a small scale by many peasant proprietors. In the north the sheep raising industry is for the most part in the hands of migratory shepherds who take up their abode on the isolated sheep farms and in the villages of the plains of the lower Danube. Here in these lonely, wind swept regions the flocks are maintained from the beginning of October to the middle of April, when the hardy, weather beaten shepherds return with their charges to the rich pasturage on the high mountain lands

Kustendje the only ice-free port of any importance on the Rumanian coast the low lying shores of which provide no facilities for reliable moorage. Originally a Greek colony it was known as Tomi whither Ovid having incurred the displeasure of the Emperor Augustus, was suddenly "relegated" about the year A.D. 9 and it was here by the shore of the Fuxine as the Black Sea was then known that some eight years later the famous Roman poet died.

Constantza is the seaport nearest the Rumanian capital Bukarest from which it lies 140 miles almost due east and with which alone it possesses direct rail communication. This is by means of the famous Carol Bridge one of the longest in the world stretching together with its viaducts some twelve miles across the Danube and its marshes.

Why Constantza has prospered

The fine natural advantages of Constantza which has been built on an outcrop of hard rock have been carefully developed by the Rumanian government and had the Dobruja no other natural wealth this seaport alone would fully justify its existence politically and economically.

The harbour possesses excellent accommodation for large vessels, and is sheltered by long breakwaters. Owing to the gradual accumulation of mud, dredging operations are constantly maintained, one part of the harbour being dredged to the depth of over 25 feet. There is an extensive export and import trade and among the exports cereals and petroleum figure conspicuously. Numerous sheds warehouses and grain-elevators have arisen on the quays a large petroleum basin for oil-loading vessels has been constructed, together with many oil-storage tanks and refineries. Nearly 80 per cent. of the Rumanian oil passes through Constantza for exportation.

The town suffered much damage before its evacuation by the Rumanians during the Great War but the

bulk of this has already been repaired and the population is given approximately at 28,000. The land in the vicinity has acquired considerable value and the suburb have spread along the north coast towards Mamaia a charming little resort where there is an excellent beach for sea bathing. South of Constantza lies Tekir-Cluonl with its well known mud bath a highly valued specific for rheumatic trouble.

Summer Resort of the Black Sea

Lighted by gas and electricity drawing its water supply direct from the Danube with its casino and well-ordered hotel Constantza has prestige not only as the principal coastal outlet for the whole of the kingdom but also as a popular and fashionable seaside summer resort and served as it is by many important steamship lines it is fair to become an attractive port of call for travellers.

North of Constantza Sulina at the central mouth of the Danube is the only harbour worthy the name until Odessa the chief port of the Ukraine is reached. Here a naval base has been established and the small town with a mixed population of about 8,000 persons far from lacking in commercial enterprise carries on a profitable business in several big factories and workshops.

River Lighters Replace Railway

The absence of a railway is not acutely felt as might be expected, since the river lighters have met the requirements of the majority of people. What the river cannot carry a broad road measuring some twenty feet across and running alongside the southern bank will convey straight to Tulcea. Sulina is provided with well built quays and the depth of water at the bar is 24 feet. Formerly as a consequence of well organized dredging operations sea-going vessels of 6,000 tons could sail with heavy cargoes right into Galatz. The work of dredging is gradually recovering its efficiency and vessels of 4,200 tons pass easily up the regulated channel to

the Danubian ports of Galatz and Braila Mangalia and Baltchik, both lying south of Constantza, are the only coastal towns of note Mangalia, a miniature port with two breakwaters and a pier, can offer no reliable shelter for ships owing to its rock-bound coast and the strong east winds Baltchik, situated on a bay of the same name, on the south coast of the Dobruja, affords a fairly safe anchorage It has been connected

confusion Bleak and desolate as is this corner of south-eastern Europe—no man's land, yet every man's land—it has attracted to its arid wastes innumerable aliens, outlaws, fugitives and desperadoes from other countries, those persecuted by church or by law, those seeking freedom from tyranny, those exiled for revolutionary doctrines "They are all the driftwood of the storms of history," wrote one who knew



L. S. Popoff

COMMUNAL FIREPLACE IN A TARTAR SETTLEMENT IN THE DOBRUJA

On the dusty, level, almost treeless plains of the Dobruja an untidy huddle of sleepy dwellings indicates the village of some alien community—Moslem, Teuton, Jew, Slav or Latin, for the Dobruja territory mothers numberless wanderers, irrespective of race and religion These village homes comprise square wooden structures and quaint hovels fashioned entirely of wattle and mud

with Dobritch by a railway which, tapping a fertile area, should materially assist in the development of the port

For purposes of local administration the Dobruja is divided into four departments, each under the direction of a prefect, and each containing a civil tribunal The total area is 8,969 square miles—only two-thirds of which, it should be remembered, are habitable—and the total number of inhabitants is roughly given as 450,000—100,000 less than the population of Bukarest That they are a remarkable miscellany of races and religions is a well-known fact, no fewer than twenty nations are represented here in picturesque kaleidoscopic

them and the lonely Dobruja well In this rude, wild region they meet, but fail to intermingle as brothers A common home they have found, but creed, tradition, language keep them apart, and in small communities they live, side by side, yet aloof, Jew, Moslem, Slav, Latin and Teuton Indeed, the villages in the Dobruja usually contain a homogeneous population, whereas towns with 4,000 or 5,000 inhabitants are really made up of four or five adjoining villages, each of a thousand souls of distinct race and creed

In most parts of the Old Dobruja the Rumanian element predominates Along the southern boundary, however, and in

the coast region of the north, between Cape Midia and Tulcea, the bulk of the population is made up of Bulgars. The Turks, on the other hand, are distributed about the country. Other foreign elements comprised in the mosaic of the Dobruja population include Tartars, Little and Great Russians, Germans, Jews, Greeks, Armenians, Hungarians, Italians, French, Serbians and Gypsies, and there are several distinct religious communities such as the Skoptsi and the Lipovani, remnants of old heretical Russian sects.

The villages are, for the most part, of poor appearance, bare and comfortless, buffeted by fierce winds and rarely with sufficient trees to give adequate shelter. In striking contrast with these are the hamlets of the fertile area, where life is less burdensome and where nature needs less persuasion to yield her rich stores. Rude wooden shanties, low mud huts, wattle and thatch provide shelter for the poorer classes in other parts of the Dobruja, while on the treacherous marsh-lands of the Danube ingeniously fashioned reed huts house the fearless fisherfolk, many of whom lead a primitive and precarious semi-aquatic life on the floating islands of weeds.

The primary occupations of the people are fishing and farming. Not a few self-contained communities exist who, depending upon their own enterprise, wrest an exiguous livelihood from arable and pastoral pursuits. Some of the fisher families are singularly adept at plaiting and making baskets, and find inexhaustible supplies of material in the vast quantities of reeds and willows

Silistria and Turtucaia, two Danubian ports, twenty-eight miles apart, each with about 10,000 inhabitants, are strategically important. Cernavoda, a town of under 6,000 inhabitants, situated north of the famous bridge, has several factories and an oil refinery.

Tulcea, the capital of the department of that name, is a thriving town and river port with a population of some 18,000. It has an important fish market, an active transit trade, and is the northern junction of the new railway. This railway branches off from the Rustchuk-Varna line in Bulgaria, bisects the entire length of the Dobruja, and has stations at Dobrich, at Megadia, where it connects with the Cernavoda-Constantza railroad, and at Babadag, one of the chief markets for the wool and mutton of the Dobruja.

Since the day when it came into the possession of Rumania, an unwelcome acquisition, the Dobruja region has developed many of its latent resources and shown a gradual growth of commercial activity. Several districts have been completely transformed by new roads and railways and it is with special pride that the Rumanians watch the unmistakable progress of Constantza, their national port.

Thus the Dobruja, the scene of many battles, the home of numberless aliens, the land of marshes and barren, treeless steppes, and yet withal the land of immense cornfields, wooded hills and pastoral plains—this wayward region, untamed but not untamable, should prove to be an ever increasing source of prosperity to Rumania.

DOBRUJA GEOGRAPHICAL SUMMARY

Natural Division A hump of land round which the Danube curves, a passage way from the Russian steppe to the Balkan Peninsula and Constantinople, provided the Danube delta is crossed. Limestone conditions prevail in the south and along the ridges, with riverine alluvium on the west and north. (Cf. Bosnia, Italy North.)

Communications Two cross-routes, one lateral, the other central. 1. The river route along the north by the Sulina

Channel to Sulina and the Black Sea. 2. The railway route across the Carpathian Bridge at Cernavoda to Constantza, the chief port of Rumania. For Danube navigation, see Austria, Czechoslovakia, Hungary, Rumania, Serbia.

Outlook As the New and Greater Rumania concentrates more steadily upon the capital, the formerly despised Dobruja will be developed in relation to Constantza, which should become the greatest port on the Black Sea.



CHIEF STREETS AND BUILDINGS OF DRESDEN BY THE ELBE

rococo (or baroque) style of architecture beloved of August the Strong. It was originally intended to be the beginning of a new palace, but it was never finished. It now houses a number of valuable collections. In its vast courtyard stands the bronze monument of Frederick Augustus I, the ally of Napoleon. The museum containing the picture gallery and the Opera House, both in the Renaissance style, are among the masterpieces of modern European architecture.

Of churches in Dresden there is no lack. Roman Catholic, Protestant, Jew, Englishman, Scotsman, Russian and American are all catered for. The Church of Our Lady (Frauenkirche) with a cupola 300 feet high, the

Church of S. Sophia, its altar said to be a fragment of the Temple of Jerusalem, and the Hofkirche (Roman Catholic Court Church), surrounded by an army of gigantic stone saints and containing a famous organ and an altar-piece by Raphael Mengs, are the most interesting.

The Royal Palace, dating from the sixteenth century, surmounted by a tower 387 feet high—the highest in Dresden—has a plain exterior, but within is gorgeously decorated. It contains many interesting frescoes and pictures. In the neighbourhood is the beautiful Georgentor. The Prinzen Palace contains a fine chapel with pictures by Torelli. The Brühl Palace, built by Count Brühl, minister of August the Strong, as a private

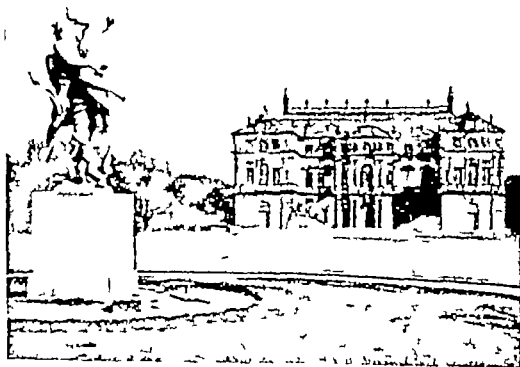
residence is used as a Parliament House by the Saxon Diet. In front of it facing the river is the Build Terrace adorned with statuary and planted with trees. It makes a magnificent promenade nearly half a mile long. The picturesque Old Market contains a memorial to the war of 1870. Among the public monuments one may mention the Maurice monument, the statue of Walter the Compeller who lived and died in Dresden, and the Loeschel monument.

In the Neustadt on the right bank of the river are the gigantic equestrian statue in gilded copper of August the Strong and the Japanese Palace built by the same energetic prince as a summer residence. It was so called because of the Japanese feeling for merely preserved there but now transferred to the Johanneum Museum in the Altstadt. It contains the royal library comprising some 900,000 volumes (more or less) together with numerous interesting exhibits among others a hiero-

glyphic codex from Yucatan (one of the lost civilizations of Central America), a parchment manuscript of the Gospels made in the thirteenth century by Callan an Irish monk, poems in the handwriting of Hans Sachs the cobbler, Lord of Nuremberg, the Koran of Sultan Bajazet II, and the manuscript of a Turkish poem (with illustration) in support of Prohibition.

Köerner the poet was born here in 1791 in the street now called the Köernerstrasse. The house is now the Köerner Museum. Schiller who was a friend of Köerner's father wrote here "Don Carlos." Also in the Neustadt is the Albert Theatre decorated with sculptures and fresco paintings by Dietrich Syraffitt in uns scratched, a white overlaid surface is scratched away according to the design leaving a dark ground beneath.

But it is chiefly for its artistic historical and scientific collections that Dresden is famous. Its picture gallery



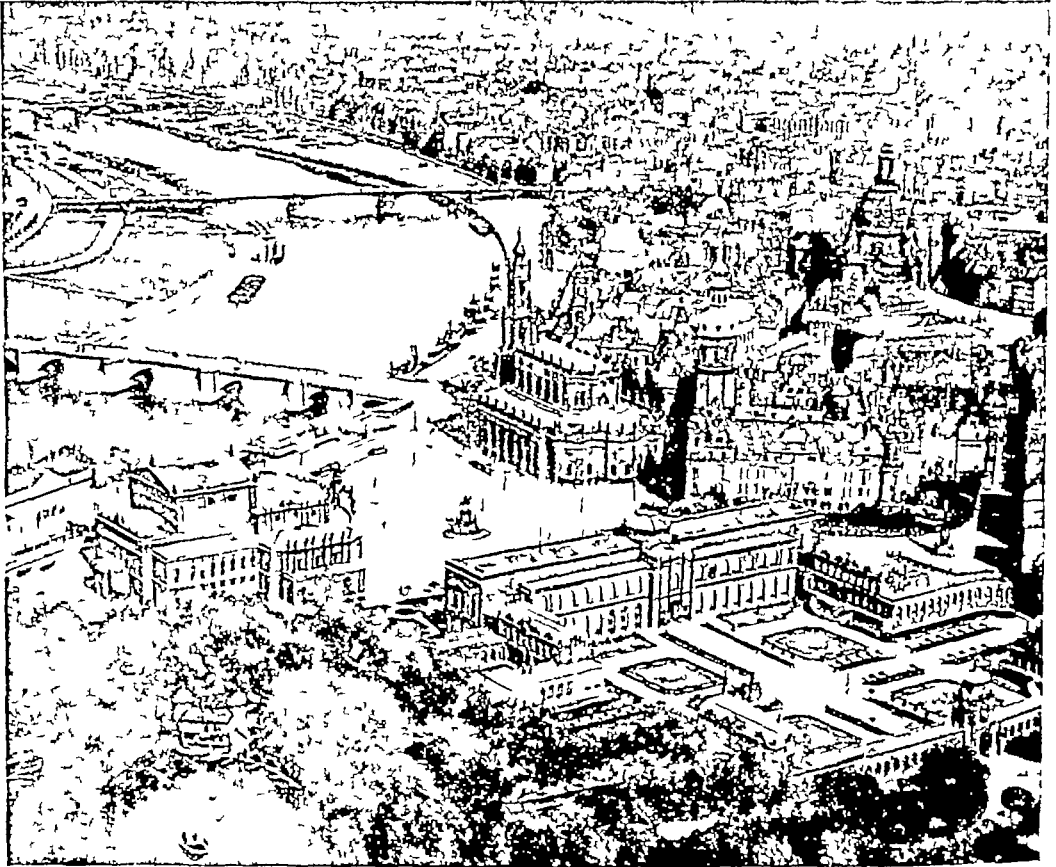
STATELY PALACE THAT HOUSES SAXONY'S ROYAL LIBRARY

Among the buildings on the right bank of the Elbe is what is till known as the Japanese Palace; this name it gained from a collection of Japanese porcelain once housed there, although it is now occupied solely by the royal library. The building was erected in 1713 by Count Flemming and purchased by Augustus II; the library was founded in the sixteenth century.

occupying the museum, is second perhaps only to the Uffizi gallery in Florence Augustus I began it, Augustus II enlarged it, and Augustus III completed it by adding the greater portion of the gallery of the Duke of Modena, for which he paid £180,000

Veronese, and Canaletto's Views of Dresden In addition to some 25,000 paintings, the gallery contains a collection of drawings and engravings arranged in chronological order

In the Johanneum Museum are beautiful specimens of Chinese and Japanese



Deutsche Aero Lloyd A G

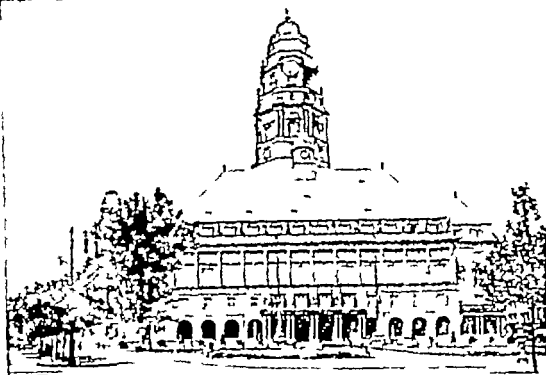
DRESDEN FROM AN AEROPLANE FLYING UP THE ELBE

The three bridges over the Elbe are the Frederick Augustus, the Carola and the Albert Bridges, in that order as the view recedes Immediately below is the Zwinger with its garden and lake, fronting on a square which has the Opera House on its left and the Hofkirche on its right The dome is that of the Church of Our Lady, while the white spire belongs to the Royal Palace

according to modern estimates an absurdly small price

Its chief treasure is the Sistine Madonna of Raphael which occupies a room to itself The Madonna of Holbein the Younger is also given special prominence, and among other pictures may be mentioned Correggio's Mary Magdalene, Rembrandt's portrait of himself with his wife sitting on his knee, the Judgment of Paris by Rubens, Titian's Venus, Van Dyck's Charles I of England, the Adoration by Paolo

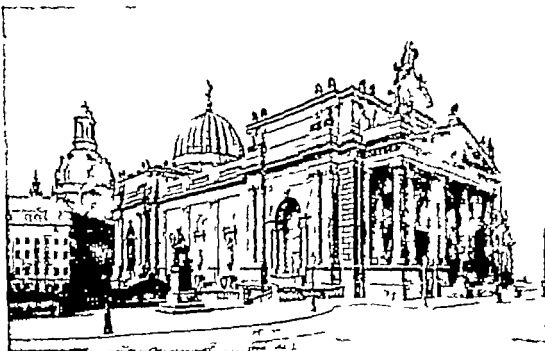
porcelain On a table in the centre of one of the rooms stand the famous vases given by Frederick William I of Prussia to August the Strong in exchange for a regiment of dragoons Augustus would seem to have had the best of the bargain The vases still remain—as beautiful as when they were first moulded In the last room are exhibited specimens of Dresden's own china, dating from 1709, when Büttger (or Böttger), a young chemist, discovered the art of making porcelain—so far



HUGE BUT BRILLIANT PILE OF THE NEW TOWN HALL

L. Richter

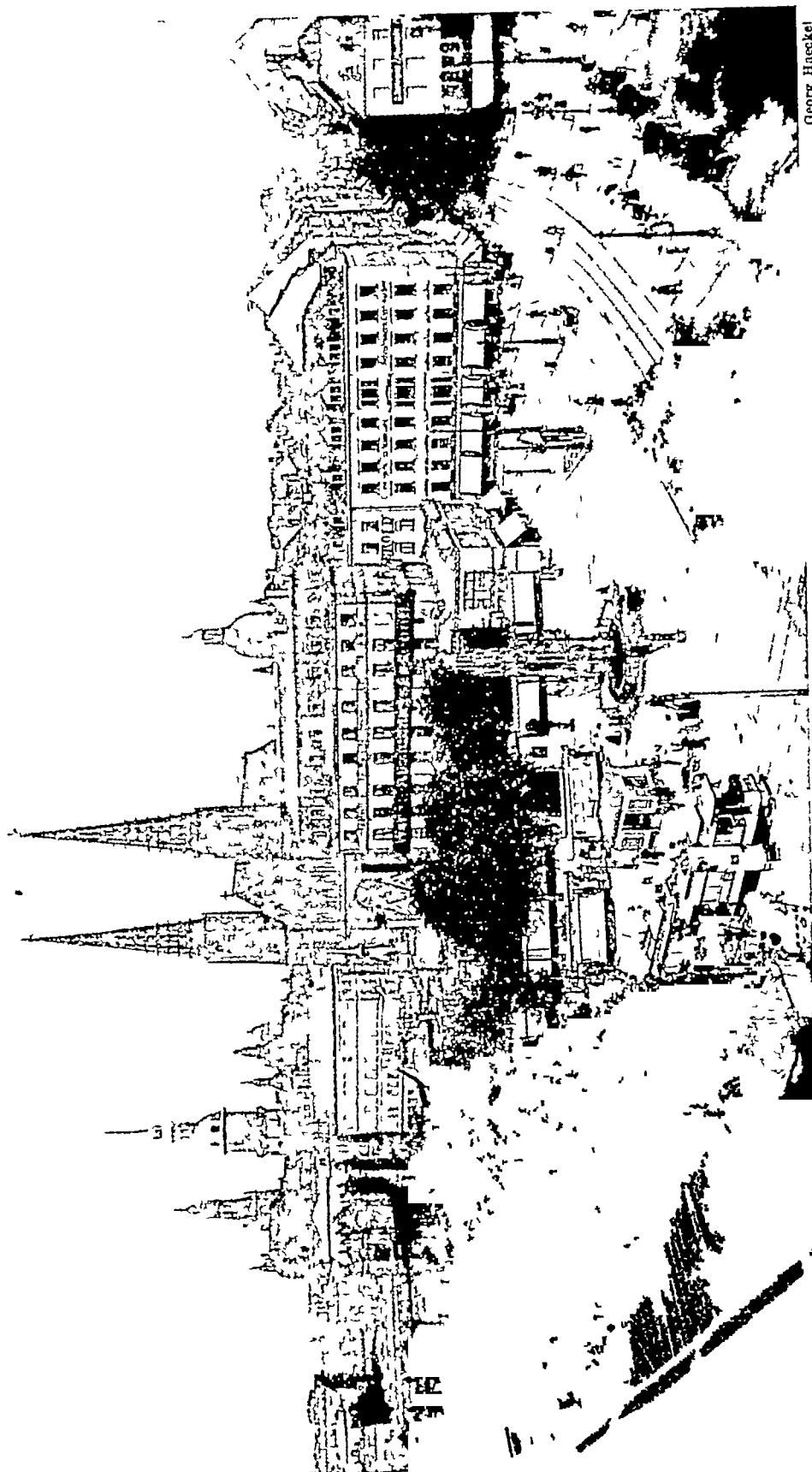
Dresden new town hall (Neues Rathaus) at the corner of Friedrichsring and Markt ring, has flamboyant effect, but it that photograph cannot convey. The facade is of light stone and the roof of red tiles; the central part is clad in copper and it towers 4 floors to the summit is gilt. The general style is Renaissance and the architect (1893-1900) was Richard Dörmann.



SCENE ON THE BRÜHL TERRACE, DRESDEN'S EMBANKMENT

G. Kunkel

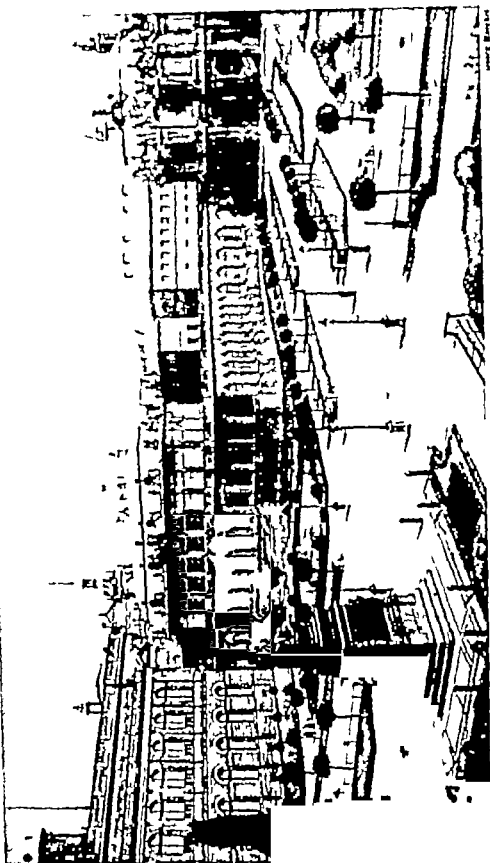
A feature of Dresden is the Brühl Terrace, laid out along the banks of the Elbe by Count Brühl in 1738. On it are many fine buildings, including the Academy of Art erected toward the end of last century; this is the entrance to its exhibition hall. The seated statue is of Ludwig Richter by Karcher, while on the left is the dome of the Church of Our Lady.



Georg Hackel

CLUSTERED SPIRES AND DOMES OF SAXONY'S REGAL CAPITAL SEEN OVER A BUSY SQUARE

As its name suggests, the Postplatz contains the central post office, which, with the telegraph office, is out of sight on the right. It is a great tramway centre, and from the roofs of its westward buildings there is a good view of Dresden. The various spires may be identified from other photographs, except the two in the centre which belong to the Church of St. Sophia. On the left is a corner of the Zwinger, while on the right Wildstrußerstrasse runs towards the Old Market. The erection in the centre of the square is strangely known as the 'Cholera Fountain'.



COURTYARD OF DRESDEN'S MOST AMBITIOUS BUILDING, BEGUN IN RIVALRY WITH VERSAILLES

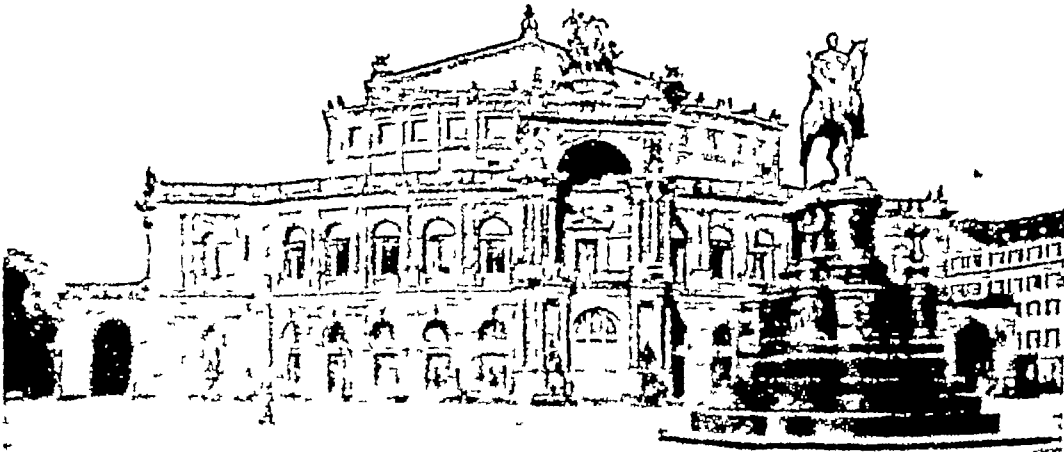
Dresden is regarded as the home of baroque architecture; and in Dresden the best example is the Zwinger commenced for Augustus II. by Popehuan in 1711. It consists of seven buildings round a central court connected with each other by a gallery. It is the best not finished for more than 100 years. It is known as the summer palace. In the centre of the court is a statue of Frederick Augustus I. which was the last to be built, is known as the summer palace. In the centre of the court is a statue of Frederick Augustus I. which was the last to be built, is known as the summer palace.



Georg Haeckel

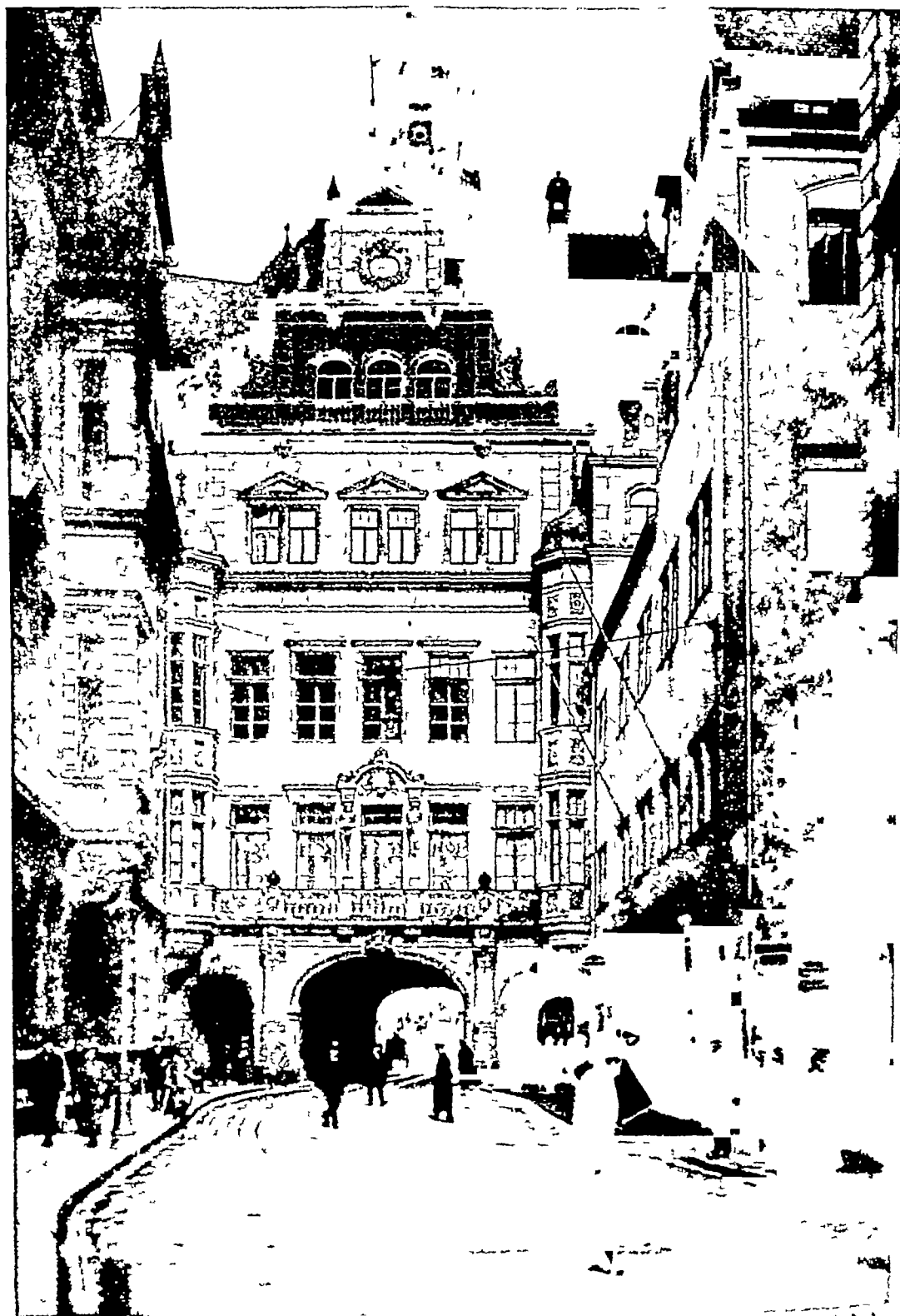
CENTRE OF THE OLD TOWN, THE ALTMARKT OR OLD MARKET

From a window of the old town hall we look across the Old Market to the tower of the new town hall, with the spire of the Kreuzkirche nearer at hand. Though the foundation of the latter dates from about 1200, the present building is a restoration following a disastrous fire in 1897. In the centre of the market place is a statue of Germania, commemorating the Franco Prussian War.



DRESDEN'S HOME OF OPERA WITH ITS CURVED FACADE

The Dresden Opera House, designed by Gottfried Semper, is a masterpiece of 19th-century architecture. Its curved facade, inspired by the ancient Greek theatre at Epidaure, is a unique feature. The building has a long history, having been destroyed by fire in 1869 and then meticulously reconstructed. It is renowned for its exceptional acoustics and the high quality of its performances.



WHERE THE ROYAL PALACE SPANS A DRESDEN STREET

The Royal Palace acquired its present Renaissance character in 1801-1809, but its foundation dates back to 1520. Here we are looking from Schlossstrasse through the Georgentor and across the Frederick Augustus Bridge—this gate leads beneath the wing connecting the palace proper on the left with the postern known as the Stallgebäude on the right.

At the opera the ladies take their hats off. There is no arguing about it—no wondering as to whether this dame will, or that dame will not. She takes it off and leaves it in the "garderobe" before she is allowed to sit down. In the parks there are special seats for children with molly boots—other seats being for grown up—"nur für Erwachsene." After ten o'clock at night it is "verboten" to play musical instruments in the streets, though stout lent returning home—and especially students of the conservatoire of music—do occasionally transgress this law.

A Pleasant Town to Dwell In

The Dresdeners are a friendly folk and Dresden is a pleasant town to dwell in. *gemütlich*, they call it. The present winter peaks from some years' experience. One can live there simply and inexpensively. Before the Great War the best seat at the opera was six marks. There is no special dressing required and one goes ther and returns by the cheap and convenient electric tram. Dresdeners are early folk. The opera and the theatres are over by ten. There is music everywhere. In the cheap concert halls one takes one's Beethoven symphony together with one's beer and sausage.

But characteristic in particular of Dresden are the private concerts got up by the students themselves. One meets small groups of them towards eventime hastening through the streets violin-case in hand, or the great bass-viol upon the back. They walk with care and circumspection not only because of their precious instruments but also because of their precious bottles in their bulging pockets. At these reunions it is the etiquette for the host to provide the eatables, but each student brings beer.

To the Albert Theatre in the Neustadt, one goes when in classical mood. One enjoys there Shakespeare, Molière, Schiller and the Second Part of Faust. The audience always comprises many children—not there, perhaps, entirely of their own free will. For simple folk

there are other theatres, also music halls and cinemas. Dresden is plentifully supplied with cafés and restaurants. The great Belvedere on the Brühl Terrace used to be the most fashionable but times change.

Winter and Summer Pleasures

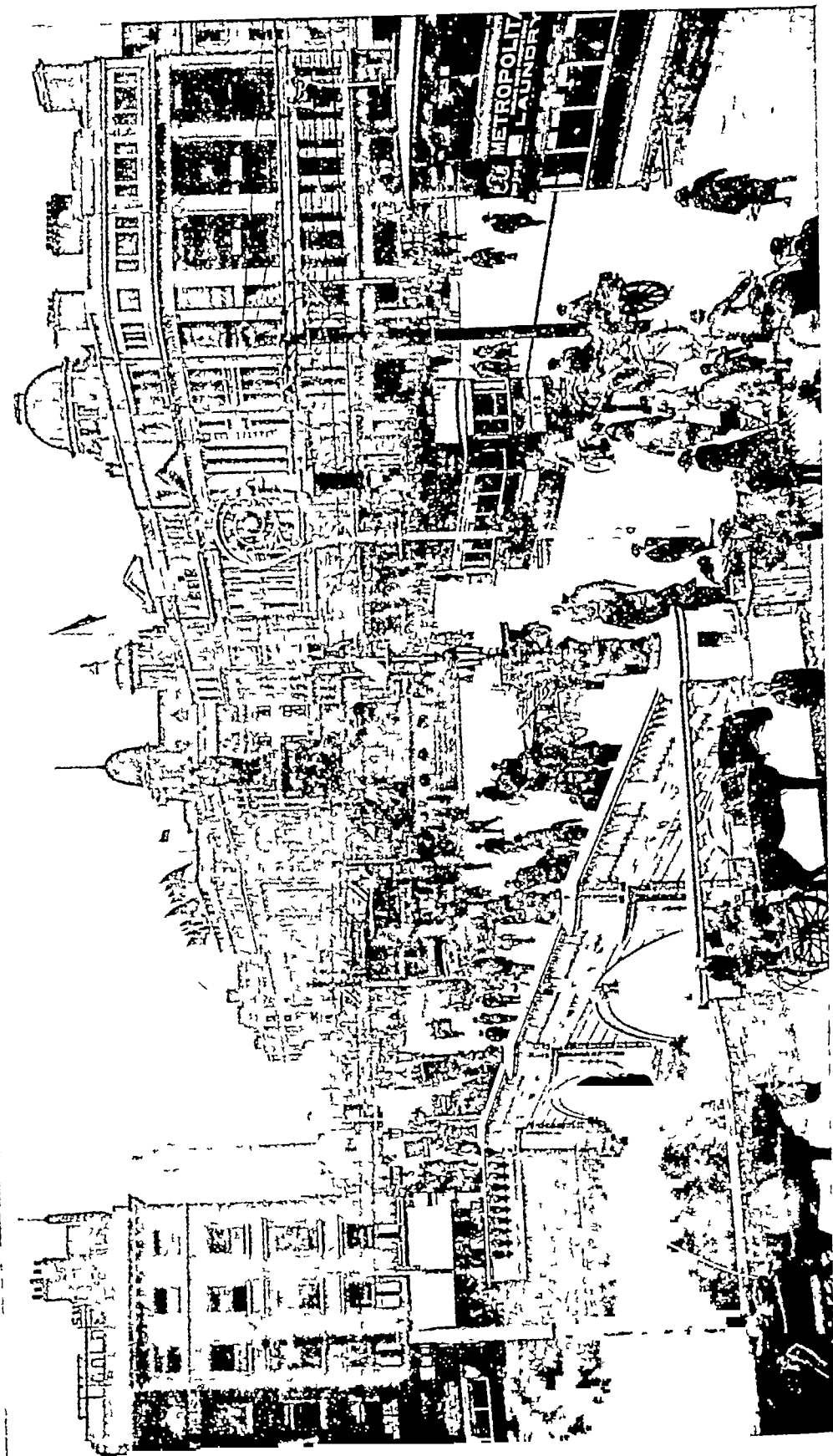
Dresden can be very hot in the summer and cold in the winter when often the Elbe is frozen from bank to bank. Some few weeks skating can generally be depended upon. The Dresdeners with German thoroughness take their skating seriously. The Carolas See and the Ladies Tich both in the Great Garden are wet and flooded each night. Heated dressing room and restaurants are provided, and all Dresden takes there to excellent music. Dresden is within easy distance of the beautiful Erzgebirge and the Meissen Hochland, the Saxon Switzerland it is called. In winter one drives there in sleighs the bells making pleasant music among the white woodland. And by steamer one reaches Pillnitz, once a royal château with sweet gardens and a pleasant restaurant where one eats wild strawberries under the trees.

Dresden Sunday Evening

On Sundays, after the great business of the midday meal the great beer halls are everywhere crowded. Children play and romp. Their elders sit drinking beer and gossiping and cracking jokes. After the supper (*Abendbrot*) the band takes its place and the floor is cleared for dancing.

And Dresden is a paradise for birds everywhere. In private garden and in public park, stand the Futterhäuser—tiny shelters to which the birds throng night and morning knowing they will always find a meal there.

Much of this description applies to conditions of life that obtained before the Great War. Since then modifications have been inevitable but with the restoration of normal stability and prosperity Dresden will resume the character that has given it its individual charm.



EVERYDAY LIFE IN O'CONNELL STREET, THE MOST SPACIOUS THOROUGHFARE IN DUBLIN CITY

Although the street architecture of Dublin is for the most part of no great architectural merit, many of the churches are exceedingly fine, and there are several handsome public buildings and hotels. O'Connell or Sackville Street is one of the best streets, a notable feature being its remarkable width. At its foot the Liffey is crossed by the O'Connell bridge near which stands the O'Connell statue an imposing work of art while in the background rises Nelson's pillar. This lofty, 120 foot fluted column in Doric style was erected in 1806 and the raised platform at the top commands a magnificent panorama of the city and its environs.

DUBLIN

Historic Capital of the Irish Free State

by Katharine Tynan

Poet and Novelist

DUBLIN lies beautifully between the mountains and the sea. Her coast-line has an Italian air as her townships lie out beside a bay blue as an Italian bay she and they under dove-grey skies or silver and golden mists are ever beautiful. The Irish air is soft as silk and the whole feeling of Ireland as you come to her is gentle.

It was unlikely that a people with a genius for creating towns should pass the site of Dublin by. The Danes those sea rovers, coming in their long boats and taking what they wanted were her first builders in A.D. 840. But it was not until after the coming of the Normans in 1169 that she became a capital city. Before that in 1014 the Irish had rid themselves of the sea rovers at the Battle of Clontarf.

The Normans came to stay. They established themselves in Dublin, in Waterford, in Kilkenny where still the Irish Town huddled outside the walls marks the humbler place to which the conquerors relegated those they had supplanted. England already had fallen to this dominant and predatory race. The Normans were great and generous conquerors. In time they amalgamated with the Irish. Strongbow the greatest of them had barely landed at Waterford before he married Eva, the young daughter of Dermot MacMurrough, King of Leinster.

Chief City of "The Pale"

Dublin became the chief city of the Pale, that is to say the Occupied Territory in Ireland, taking in Louth Meath, Dublin and Kildare, with outposts here and there through the country. Bristol merchants flocked over to Dublin and set up their businesses

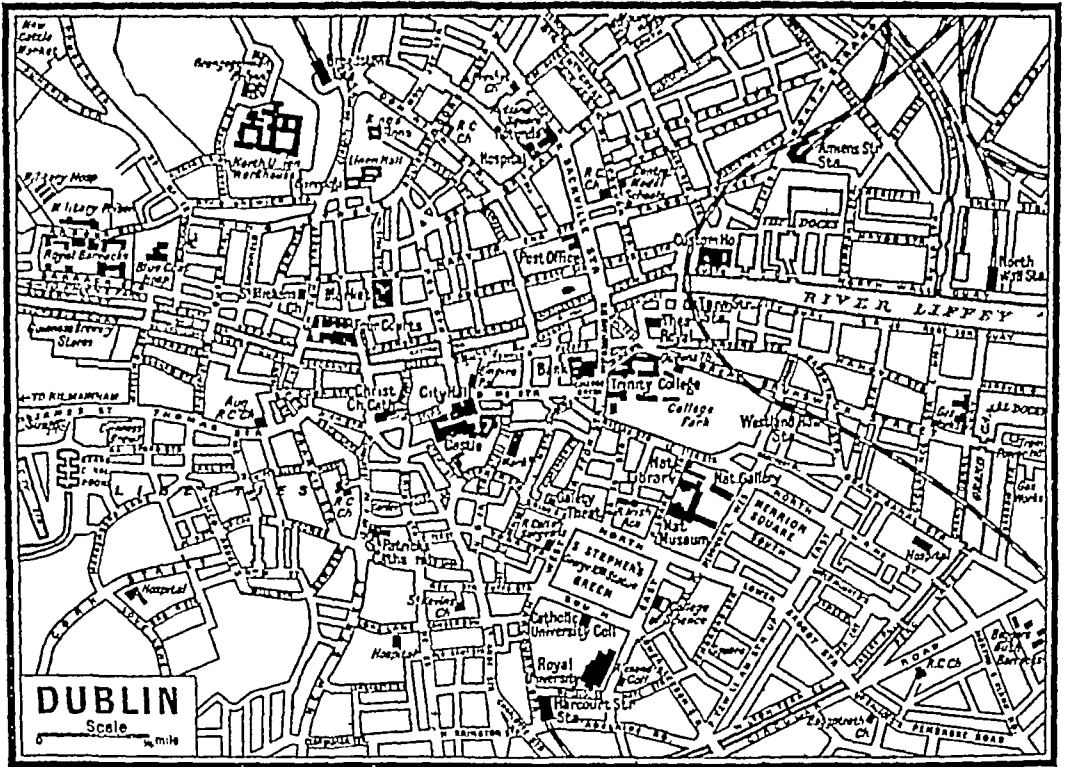
there. The Normans, meanwhile as time went on were building splendidly ruling and fighting splendidly and marrying with the Irish. Not all the laws which in time were enacted forbidding marriage with the Irish, and fosterage by Irish mothers, could prevent these things. The de Burghs of Connaught flung off their Norman dress and donned the saffron kilts of the Irish. The Normans became in time more Irish than the Irish.

Town Walls Vital Protection

For a long time Dublin within its walls, on the banks of the Liffey was a little town half a mile long by a quarter of a mile wide. It contained nevertheless two cathedrals—one more than any city of northern Europe—a dozen abbeys and a score or so of churches. It did not extend beyond its walls, for there were always the Irish tribesmen in the Wicklow mountains ready to swoop down upon the comfortable citizens of the Pale, to harry them and to carry off their cattle.

It had various stirring incidents. It defeated Edward the Bruce. It received and crowned in one of its cathedrals Perkin Warbeck, the impostor. It saw the rebellion of Silken Thomas, son of the Earl of Kildare. The Reformation came to it and passed it by except for a few conforming bishops. Most of the history of the Middle Ages in Dublin still more in Ireland, is a record of great fighting or little fighting in which the smoke of battle obscures the things that were of every day.

All through the Middle Ages Dublin remained a city of the English Pale. Only the hewers of wood and drawers of water were Irish. The power of the



PLAN OF IRELAND'S ANCIENT SEAPORT CAPITAL

Irish had been broken by successive plantations, the lands of the Irish being given by Queen Elizabeth and by James to various great English adventurers, capable of holding what they seized. The Normans were in time on the Irish side. The terrible clearances in Munster of Elizabethan days swept away the Earls of Desmond and the southern Fitzgeralds.

Dublin had shared the fate of English cities. It had suffered fire and pestilence. It had its English viceroy and its English council and its English institutions, and from the grey walls of Dublin went forth armies to fight. The Irish chiefs and lords were for ever hurling themselves against the English power. Ireland, under Elizabeth, had become the happy hunting-ground of the great English adventurers of Gloriana's reign. Raleigh sought El Dorado on the shores of the Blackwater, and Spenser wrote the "Faery Queen" in the midst of the desolation and famine following the suppression of the Desmond rebellion. The lands and estates of the Irish were being more and

more parcelled up and distributed, their original owners being outlawed men on the mountains and bogs.

Now and again an Irish chieftain went over to treat with the Queen, making a picturesque and romantic figure in the court of Gloriana. Shane the Proud, one of the great O'Neills, who was afterwards a great rebel, was a page there, and there was another O'Neill, known as Phelim the Bastard, of whom it is a tradition in the southern Irish countryside that his wit and audacity so pleased Gloriana that he might have been of her suitors, and a successful one, if he had but chosen. Then there was he who is called the Sugaun (or straw) Earl of Desmond, a tragic boy, who having been educated in England came home to the passionate welcome of his people, only to be cast out and disowned by them when they found that he was of the English faith.

Dublin was still a small city and a dark one, crowding about Dublin Castle and the two cathedrals which had become an appanage of the new religion. To Dublin Castle came in

Elizabethan days the captured Irish chieftains Hugh O'Donnell, Earl of Tyrconnell, was a prisoner in the Bermingham Tower in those days he after escape and recapture finally got free by way of a sewer. He had a period of rest and shelter with Leach MacHugh O'Byrne, one of the Wicklow chiefs, for he had crossed the mountains barefoot in the snowy weather just before Christmas and needed rest and care. Finally he made his way to the north where with Hugh O'Neill, Prince of Ulster and Earl of Tyrone, he made a last stand against the English power.

Dublin of that day is in the maelstrom of war with an occasional blackness of pestilence and plint of steel and fire amid the murkiness. I suppose the traders were trading even in those turbulent days but there is not much record of what was happening beyond the fighting. Queen Elizabeth's College of the Sacred and Undivided Trinity had been established on what was a marsh. Long after it had become a recognized seat of learning the students

were prohibited from shooting snipe in the College Park. On either side of the river still lay the marshes.

Cromwell's campaign in Ireland passed Dublin by. She had her excitements for the brief period when James II reigned, and there was a Catholic regime even in Trinity College. The Irish and the Anglo-Irish lord were Jacobites. They had acclaimed the Restoration and the great rejoicing that that event brought to England was shared by the loyal citizens of Dublin. Ireland loved the romantic Stuart as he never could love the Hanoverian. Like the other lovers and servants of that fascinating dynasty, he was but ill repaid. Dublin began to expand under Charles II. The Duke of Ormond was viceroy, he was such a splendid and stately person as the old Irish loved, withal a man of taste and cultivation. The first bridge was thrown across the Liffey to replace the ferries. St. Stephen's Green was laid out, the Royal Hospital at Kildareham, Ireland, Chelsea, was built from the



PARLIAMENT SQUARE, THE QUADRANGLE OF TRINITY COLLEGE, DUBLIN. W. L. MARY
Trinity College, Dublin, affectionately known as T.C.D. was founded by charter in 1591. A lofty campanile occupies the centre of the large quadrangle. On the left, the north side, are the chapel, dining hall and the Graduates' Memorial Hall; on the east, behind the campanile, is the red-brick range of College Chambers; on the south, out of the picture, are the examination hall and library.

design of Sir Christopher Wren The Bluecoat School was set up in Blackhall Place on the north side of the river Phoenix Park, which is one of the glories of Dublin, was planted originally as a pleasure-ground for the viceroy under the Duke of Ormond, but after a time the people were made free of it

Falling of the Stuart Star

Doubtless a reason for the Irish allegiance to the Stuarts apart from reasons of romance, if romance is ever reasonable, was their strange friendliness, in that day, towards the Catholics The sons of Henrietta Maria must have some leaning towards their mother's religion and the liberal views of the Merry Monarch towards Catholicism were well known James II, cast out by his English subjects, entered Dublin amid great popular rejoicings The Catholics had flocked out of their hiding-places to welcome a Catholic king Mass was said once again in Christ Church, and a Catholic provost, who was also an ecclesiastic, was appointed to Trinity He is credited with having saved the library of Trinity College from the turbulent soldiers who, for the moment, had turned the place into a barrack.

The Stuart star went down at the Battle of the Boyne, and the last stand of the Jacobites was made at Limerick After the surrender at Limerick of the men who had fought for King James—roughly the Catholic aristocracy of Ireland—the descendants of the old Irish and the Norman families went away and took service in the armies of Austria and France and Spain, leaving their humble co-religionists to the oppression of what was known in Ireland as the Penal Days

Evolution of the Anglo-Irish

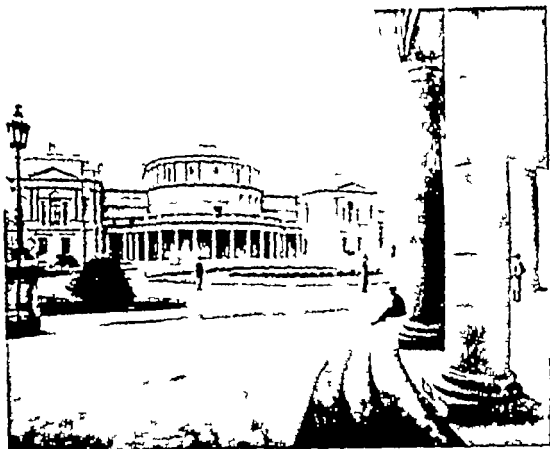
During that eighteenth century, so bitter and dreadful for the Catholic Irish, the Anglo-Irish ascendancy, as it is called, ruled in Dublin and over the rest of the country Successive plantations had evolved the Anglo-Irish, a

dominant and constructive race In the eighteenth century Dublin begins to emerge from mists and shadows The real Irish were negligible at that time, debarred, by reason of their religion, from any rights of citizenship or any share in the government of the country, they were refused education or any of the rights of property, or the right of religious freedom

Dublin went on as an English town with certain things added The planters had gained something from the air and the skies and the mountains and fields of Ireland The Anglo-Irish sat in their castles, an element alien from the people at their gates, fast ceasing to be English, whether they would or not, coming to love the people, whether they would or not, acquiring a mad gaiety and irresponsibility They out-Mohocked the English Mohocks For the Medmenham Abbey of their English namesakes they had the Hell-Fire Club on the mountains overlooking Dublin, the ruins of which are still there The tradition is that the devil himself came and sat at the table with these roystering Anglo-Irish gentlemen

Wigs on Fair Green

It was the day of the duel, when every morning gentlemen pinked each other in Phoenix Park or Bully's Acre, for some real or fancied wound to their honour Duelling, presumably, became a habit, and if one could not have it by fair means one must by foul The reveller at Donnybrook Fair, who trailed his coat over the Fair Green, calling out "Who'll tread on the tail o' me coat?" and fought the man who accepted his challenge, only imitated the Anglo-Irish squires like Mr Ram of Gorey, known to his contemporaries as the Great Ram Mr Ram, when he had no legitimate cause of quarrel that might be met by a duel, went out riding a horse with his face to the crupper and his saddle stuffed with straw, scrutinizing passing faces for laughter If one smiled he was instantly challenged by Mr Ram

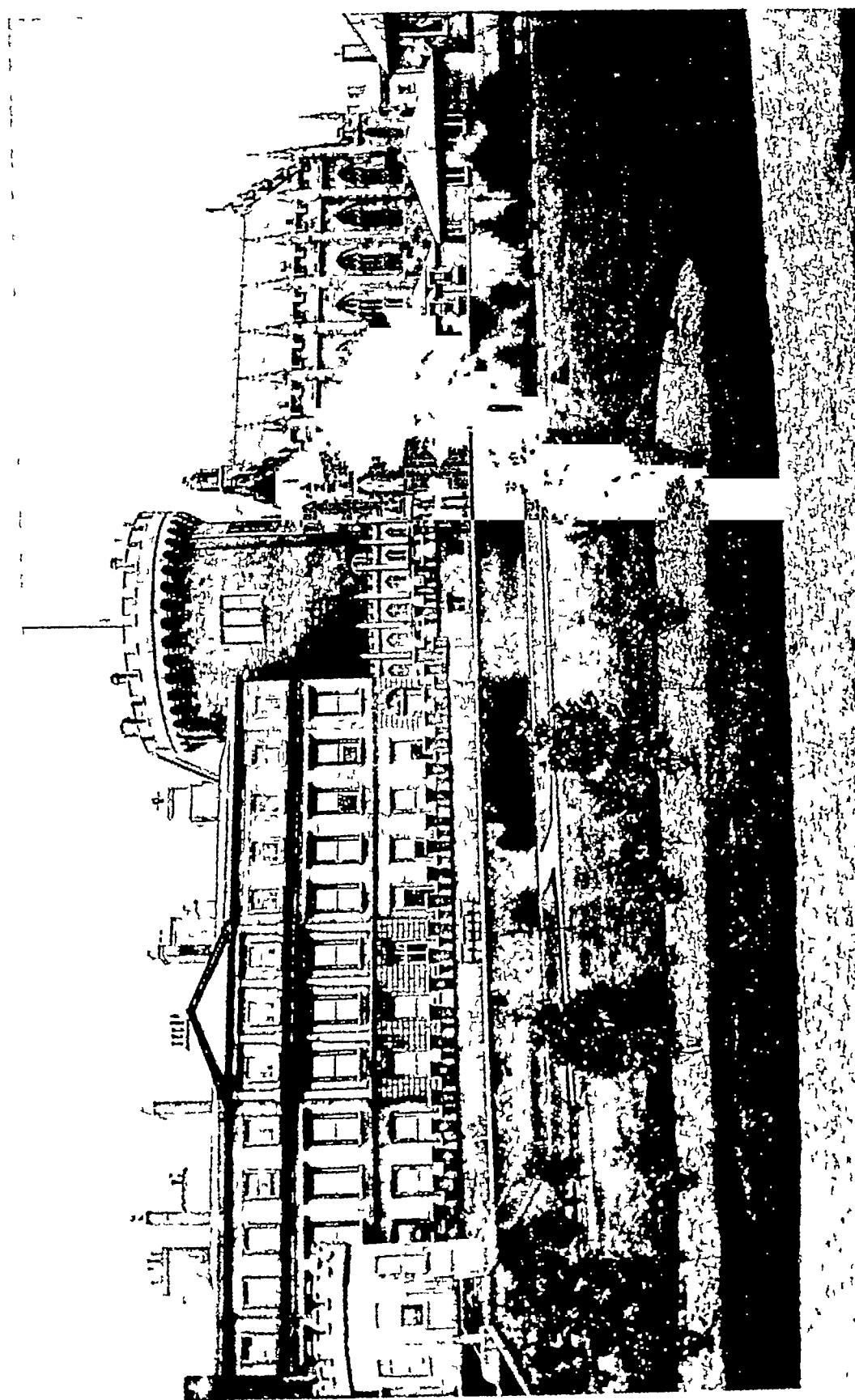


Its unique collection of Irish antiquities is the chief glory of the handsome National Museum of Science and Art in Kildare Street Dublin



DUBLIN On the north side of College Green behind the Grafton Statue extends the noble colonnaded Ionic façade of the Bank of Ireland

Photos by W. L. Brown



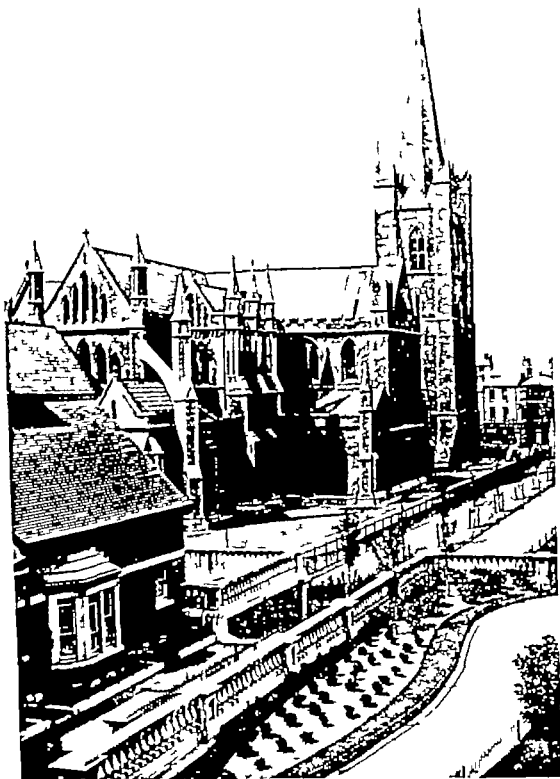
DUBLIN Thrice in its long history has Dublin Castle been rebuilt The Bermingham Tower, in 1331 the prison of Sir William Bermingham, is among its oldest portions The Chapel Royal near it dates from 1814



DUBLIN Phoenix Park covering nearly 2 000 acres is the largest park in Europe On the right side of the main avenue is the former Viceroyal Lodge screened from public view by trees and dense shrubberies



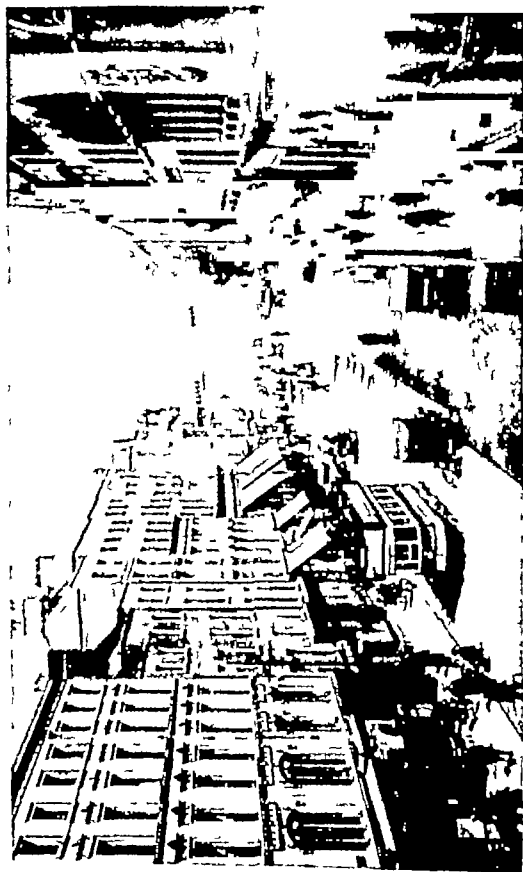
DUBLIN About the Castle and Cathedrals lies the oldest part of Dublin with many squalid alleys lined by mean houses let off in tenements



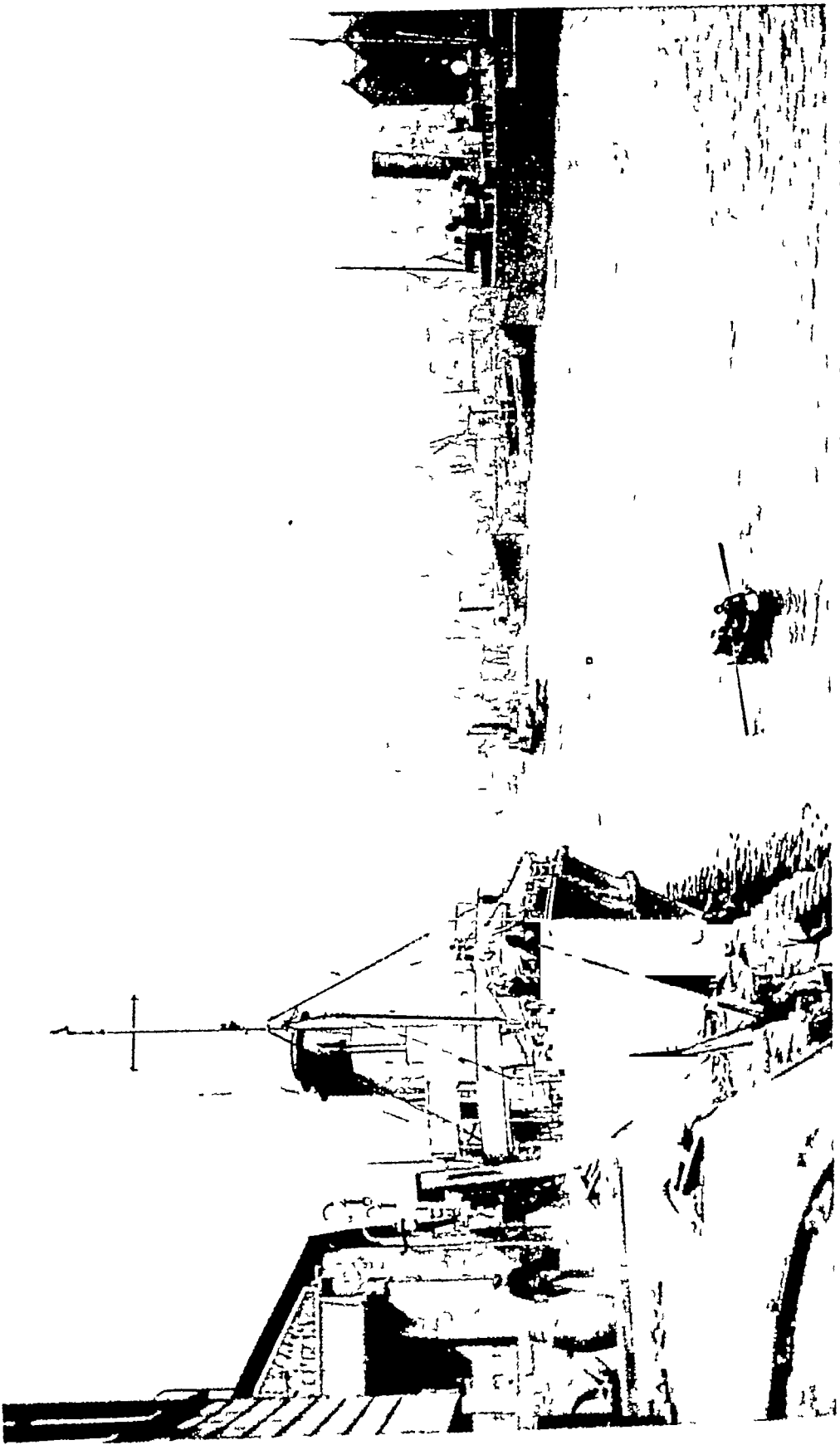
DUBLIN *S. Patrick's Cathedral founded in the 13th century and restored in 1860 is a superb cruciform church with a 14th-century tower*
1681



DUBLIN West of S. Patrick's Cathedral lie the Liberties, a district whose name commemorates privileges granted to the Abbey of S. Thomas over 600 years ago. Here mean streets abound, of which this, New Row, is one



DUBLIN Dame Street, running from College Green to Parliament Street, is one of Dublin's busiest thoroughfares. It is east end can be seen the equestrian statue of William III and the front of Trinity College.



DUBLIN Bisecting the city from west to east, the Liffey is the main artery of Dublin's commercial life On both sides it is lined with busy quays stretching from King's Bridge to the Docks

was short. It was splendid while it lasted, but his brilliant reign ended with his sudden death before the Anglo-Irish had had time to get tired of him.

Dublin was practically rebuilt in that great half-century. The Anglo-Irish nobility and gentry, after making the Grand Tour, came home dissatisfied with their houses. There was a veritable renaissance in Dublin. During those years Dublin moved across the Liffey and built splendid houses. Sackville Street and the squares north of the city, Temple Street, North Great Georges Street, Dorset Street, Great Britain Street and Summer Hill—the names are redolent of the time wherein they came. The Lords and Commons of Ireland had gone a-building and they did it royally.

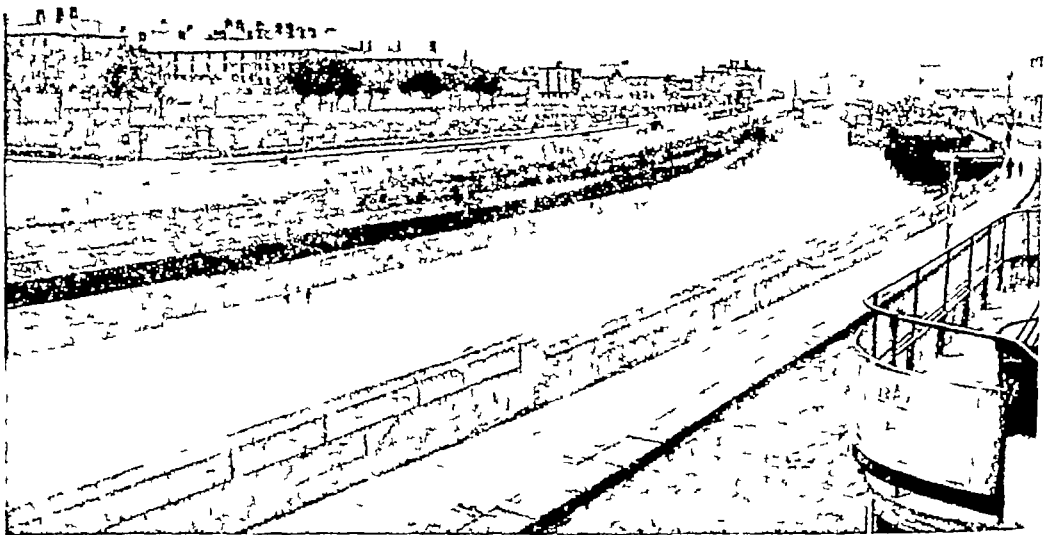
Artists were brought from Italy to decorate the interiors of the houses with the stucco work which yet hangs on walls and ceilings of dingy dwellings, still shapes of beauty. Angelica Kauffmann painted the ceilings of some of the houses. The marble mantelpieces were inlaid with colours by one Bossi, an Italian artist. Chippendale's and Sheraton's pupils were working at cabinet-making in Dublin, and the

Dublin silversmiths were doing beautiful work, as were the glass-blowers of Waterford and Cork.

The man of whom it might be said that he found Dublin mud and left it marble was John Beresford, Commissioner of Customs, a truly Roman personality. The Beresfords were the great power in Ireland at that time.

The Beresfords, unlike the Fitzgeralds, never sided with the people. They were not concerned about freedom for the Catholics or legislative freedom for the country. But John Beresford had great dreams and he found the man to give them life in James Gandon, an architect of genius. For his noble patron Gandon designed the Four Courts and the Custom House, things of beauty in stone. To see the Custom House as it used to be, in the misty Irish air at dawn or sunset, was to realize "a rose-red city, half as old as Time."

Society in Dublin then was very splendid. At the dances and assemblies at the Rotunda, the Assembly Rooms which Dr Bartholomew Mosse had built on to his Lyong-in Hospital, to afford it a revenue, all the distinction and beauty of Dublin and visiting Dublin was to be



ERSTWHILE ROYAL BARRACKS VIEWED FROM ACROSS THE LIFFEY

On the north side of the Liffey, between King's Bridge and Victoria or Barrack Bridge, stand the extensive military buildings dating from 1786, formerly known as the Royal Barracks. Behind them on Arlon Hill, are a military hospital and prison. In front of the barracks, between them and Albert Quay, Barrack Street runs on the left into Parkgate Street at the end of which is the Park.



MAIN GATE OF PHOENIX PARK, DUBLIN'S BEAUTIFUL PLEASANCE

Phoenix Park is one of the largest and most beautiful parks in Dublin. It is a large, open area with many trees and a large lake. The park is a beautiful place to visit and is a great place to spend a day. The park is a beautiful place to visit and is a great place to spend a day.

seen Joan Wesley was visiting the saintly Countess of Mar at her house on Usher's Island which later was converted into a Municipality Institution which the citizens of Dublin use to call the Municipality. Wesley noted in his Journal the splendours of Moura House. The drawing room was lined with mother of pearl. Alas! he wrote prophetically that all this must pass like a dream.

Towards the closing decades of the eighteenth century the ladies at the Rotunda balls began to wear their poplin gowns sprigged with green and silver shamrocks—poplins were introduced by the Huguenots who found a refuge in Dublin after the Revocation of the Edict of Nantes and had formed a most estimable body of citizens. Liberté! Egalité! Fraternité! were sounding.

In 1782 the Volunteers proclaimed the freedom of Ireland to have her laws made and administered only by the King, Lords and Commons of Ireland. The lions whelp again. England had been killing out the Irish industries of her colonists by preferential tariffs for her own products. England accepted the will of her colonists for self-determination. It was a proud moment

Ireland by did not perpetuate was Cattan's proud greeting to her.

Alas! Thirteen years later came the R. rebellion of 1795 a rebellion which was more Protestant and Anglo-Irish or Scottish of the North than Catholic and Celtic. It went down in blood and two years later the Legislative Union was carried.

For many years Dublin was as dead. The Irish gentry became absentee. Their great houses went to ruin and grew in the streets of the city. Very slowly Dublin and Ireland began to recover. The nineteenth century brought periodic famines and pestilence culminating in the great famine of 1848 with the resulting emigration. The population of Ireland which had been eight millions fell to four millions after the Black 48.

From 48 onwards there was a revolutionary movement about every decade or so. Then came the Home Rule Movement of 1872 which was run by Girondist gentlemen on ideal principles. The Land League of 1879 following two or three wet summers. Home Rule again with Mr Gladstone as its introducer. Dublin was the centre of all these movements.

or, at least, the controlling factor. Of course the Revolution has changed the complexion of the Dublin streets. It has ceased to be a city of the Anglo-Irish and some of the tokens of their ascendancy are gone or marred, like the Custom House, the Four Courts and the old Post Office. It has no longer an Athenian look, though nothing can ever take away from it the fortunate beauty of its situation. I can remember Dublin is full of country people. There used to be sun-browned cheeks and pleasant country speech and the height and breadth of manhood and womanhood that go with country life and pursuits. Dublin is in the melting-pot with the rest of Ireland, and for the time being it is full of townsmen.

Once people were always buttonholing each other with obviously good stories, and, quite oblivious of the passer-by, roared over the good stories in a way to send you on your journey amused and exhilarated. Yet the people are as pleasant as ever when you get to talk to them, as whimsical and fresh and inconsequent as ever, and the qualities that always made shopping in Dublin a gay adventure are there ready to come to the surface on a little encouragement. There are very good Dublin hotels, and there is plenty of racing and other forms of sport to be had.

The Anglo-Irish ascendancy in the pleasant old life was not anxious to see Ireland modernised. It was always at least fifty years behind the time so far as modern conveniences went, but what did it matter in so pleasant a country?

Now one is less satisfied with the

Dublin cabs and the Dublin mud and the cavernous dark roads of the suburbs and the townships and the absence of electric light, because the good humour and the gaiety which made it all acceptable are under a cloud. Dublin and Ireland are shifting and changing, but the charm of the country and the people remains. They are still the most unexpected people in the world.

It was a very happy place as I remember it, the gayest city in Europe despite the poverty of many of its inhabitants—as Ireland was the gayest and gentlest country, good for men and women and horses and hunting and dancing and all kinds of diversion—yet with an incomparably bad housing system and a poverty in which human dignity should have been eclipsed by all the laws, yet remained for the greater part, with kindness and cheerfulness and abundance of laughter and innocence of heart and hopefulness. The good things of life may have been only for a class, yet the country was a very happy one in which there was one common tie, that of good breeding, good nature and honest laughter.

For the moment Dublin is shorn of her glories. We know what has been, we do not know what is to be. Let us not say with Wesley "Alas, that all this should have vanished like a dream!" Let us say rather with Grattan when he found that all his dreams were laid in the dust "Yet I do not give up the country. I see her in a swoon, but she is not dead. There is on her lips a spirit of life and on her cheek a glow of beauty."

DUBLIN: A FOOT-NOTE

Situation On Dublin Bay, north of Wicklow Hills, at mouth of river Liffey. Extensive docks and tidal basins are connected with various parts of the city by canals.

Communications Exterior—by sea to Liverpool, Holyhead, Glasgow, etc. Also four main line railway termini. Interior—good electric tramway system in principal streets connecting with suburbs.

Trade and Industry Principal trade is in export of cattle and agricultural

produce. Brewing porter (or stout) is an outstanding industry and silk poplin is made. Other industries are biscuit-making, the manufacture of fertilisers and distilling.

Dublin is the capital of the Irish Free State and contains the residence of the Governor-General and the Irish Parliament House. A notable building is the Abbey Theatre, centre of the nationalist movement in drama and devoted exclusively to the production of plays Irish in character and origin.

LAST AFRICA

Land of the Great Equatorial Lakes

by C. I. Stock Reid

Author of "The Zambezi to Khartoum"

MANY with the theories of the last century would have held that Africa was not the land of natural frontiers. But the last Africa may be said to be bounded on the north by the mountain of Abyssinia, on the west by the bay of great lakes. All that lies between Tanganyika and Nyassa, and on the south by the Zambesi river. Geographically much of this is politically still within the Central Africa.

Within these limits lies an area of about 1,000,000 square miles in extent, if we include that portion of Mozambique lying south of the Zambezi, though it contains no less than five separate countries—the British Colony of Kenya, Uganda, Tanganyika (the former German East Africa), Nyassaland and the Portuguese Colony of Mozambique—it may yet be conveniently considered as a unit in that it comprises the greater part of the Central African Plateau fringed by a tropical coastal belt along the Indian Ocean. This coastal strip, save in the extreme north of Kenya where it merges into the barren plains of Juba land and along the Rovuma river in Tanganyika is narrow and presents a certain uniformity of character.

Coastal Configuration

Along the sea's edge lies an endless succession of sandy beaches and mangrove swamps broken by creeks and some fine natural harbours—Kilindini, Tanga and Duru Salaam in Tanganyika Territory, Beira and Delagoa Bay in Mozambique—and backed for the most part by low coral cliffs behind which lies the coastal plain generally fertile especially along the river but oppressed by a damp heat very trying

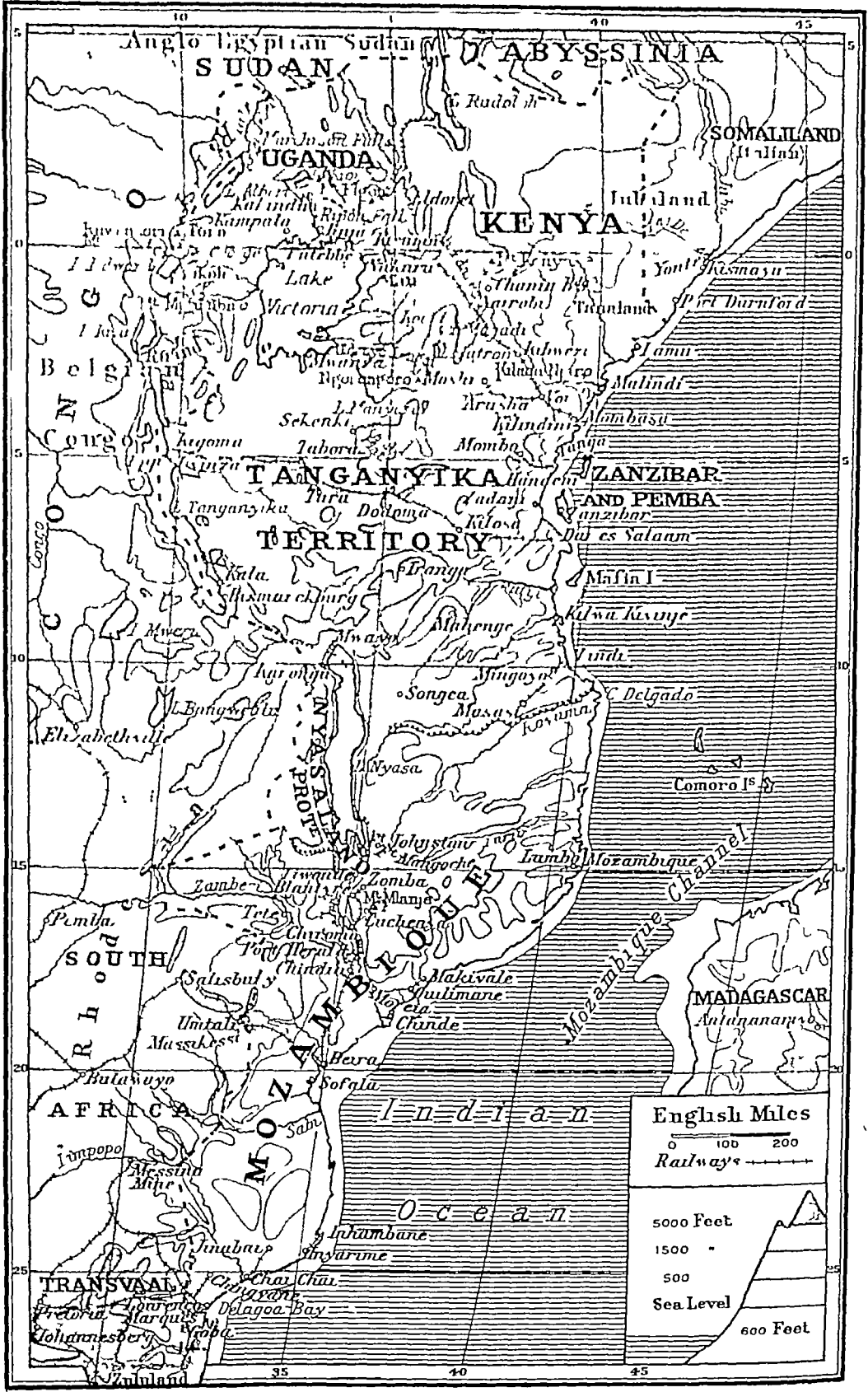
to European. Behind this again the land rises through a limit of flora and fauna from the tropics to the temperate of the last African plateau.

The Plateau may be said to include all the country up to 10,000 feet together with the lakes and lower part of the Great Rift Valley which cut a gash clean across East Africa. Over most of its extent is a grassy country, such as the Lukya Plains in Kenya and the Loosha country in Nyassaland. It is curiously reminiscent of the English Downs and forming excellent grazing grounds, but in many places it rises to great mountain systems such as Kilimanjaro.

"The Mounts of the Moon"

Of the latter Mount Kilimanjaro, 19,341 feet, the highest mountain in Africa, and Mount Kenya, which gives its name to the colony, are the loftiest. Of the former the Longonot Range, 50 miles long and running up to nearly 15,000 feet on the west in border of Uganda and the Mfumbiro mountains reaching over 14,000 feet on the southern border are the most impressive.

Ruwenzori and all one of the most romantic ranges in the world. Cited at with astonishing accuracy centuries ago by Ptolemy as the source of the Nile, these half-legendary "Mounts of the Moon" were only discovered in 1889 by Stanley after many explorers had passed along their very base without realizing their existence owing to the mists which lie almost eternally along the summits. And mention should also be made of another marvelous mountain range—the Highland of the Great Craters in Tanganyika Territory, a jumble of vast extinct volcanoes of which only one Oldonyo-Lengai has been



PLATEAUX, PEAKS AND GREAT LAKES OF EAST AFRICA

active within the memory of man. Kenya also has her great range in the Aberdares, while Nyasaland finds her highest point 9 800 feet in the Mlanje Mountains a short isolated range rising with amazing abruptness from the plain.

Curiously enough in all this country of nature on a gigantic scale there are with exception of the upper reaches of the Nile and the lower reaches of the Zambezi both described in other chapters, no rivers of first magnitude though this is not to say that there are no rivers which would be considered large in Europe. The Maputo for instance in Mozambique, is navigable for motor

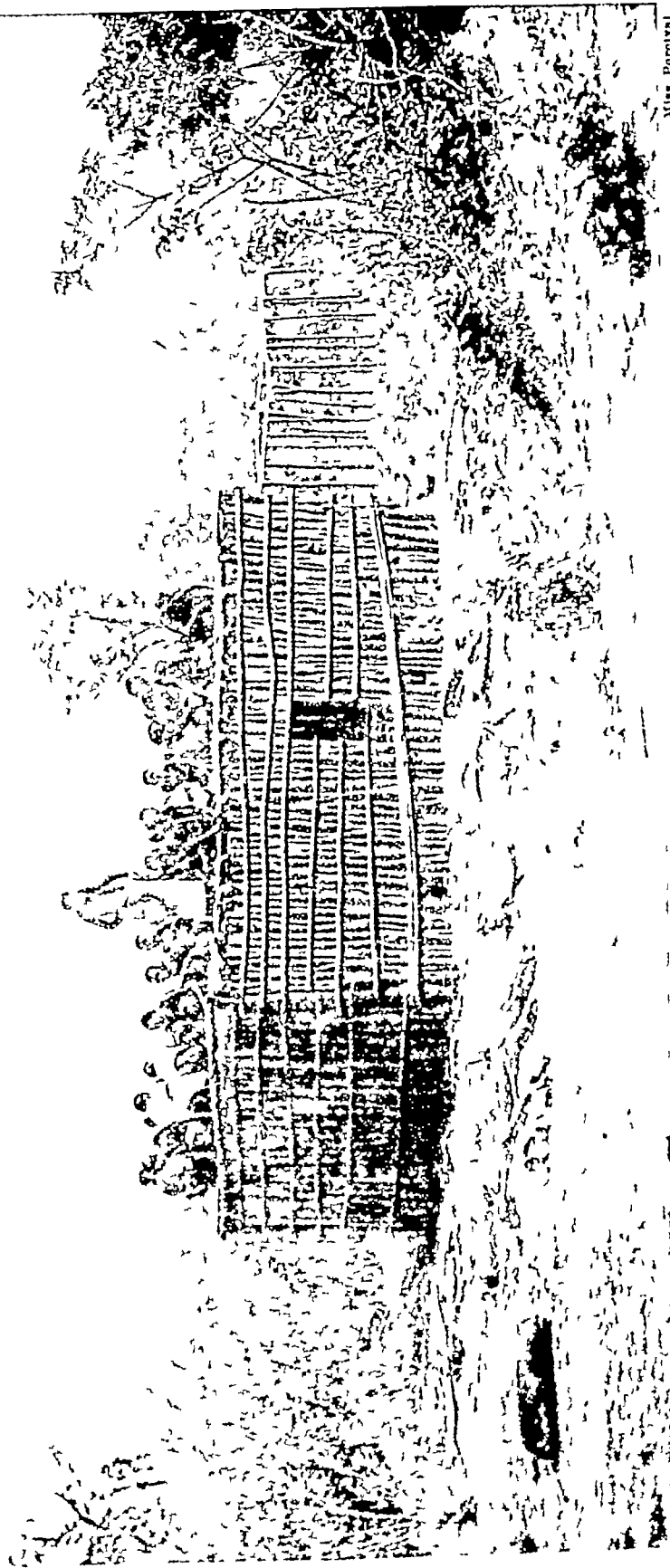
launches and small craft over 200 miles of its course and the Shire which flows from Lake Nyasa to the Zambesi as far as Churomo. The Rufiji in Tanganyika is large in the rainy season.

But the region makes up for the comparative smallness of its rivers by the variety and vastness of its lakes no area in the world contains so many and more than one-seventh of the whole area of Uganda alone is covered by water. Lake Victoria, as large as Ireland with 17 harbours capable of taking vessels up to 1 200 tons. Lake Albert in Uganda Tanganyika 400 miles long by 50 wide a narrow ribbon



VILLAGE SCENE ON BANK OF THE UPPER SHIRE ABOVE LIWONDE

The Shire river of the Nyasaland Protectorate and Portuguese East Africa forms the south outlet of Lake Nyasa and is 275 miles long. Owing to the decrease in the flow of water from the lake, the river has become shallower and navigation up-stream as far as Churomo is extremely difficult. The chief settlements on its banks are Fort Johnston, Liwonde, Churomo and Chindio.



Miss Porcival

FREE LABOUR ON A NATIVE CHIEF'S GOAT-HOUSE IN THE BRITISH PROTECTORATE OF NYASALAND

A large portion of the Nyasaland Protectorate, which extends along the southern and western shores of Lake Nvsa, is mountainous or composed of lofty plateaux, and the climate is common almost everywhere up to an altitude of 3 000 feet. Several hundred white men have settled here, chiefly in the Shire Highlands which offer a more equable climate and have direct railway communication with Beira on the coast so that the route along the Zambezi Valley with its risks of fever is no longer a barrier. Above its scene natives of a village in the Mangochi Mountains building a goat house for their chief, bumboo being the chief building material.

of brackish water popularly supposed to be bottomless, Nyasa, the third largest lake in Africa, and the beautiful Kivu are the most important. But perhaps the most interesting are the Soda Lakes. Of these the best known is Magadi, an almost waterless lake of soda resembling a frozen pond in fantastic contrast to the terrific heat and the grim, extinct volcanoes which surround it and looking for all the world like a picture of the infernal regions. Butnatron, farther south, is covered with water, a brilliant electric-blue in colour shot with rose-pink streaks where thousands of flamingoes disport themselves in the shallows.

All these are, of course, the aftermath of eruptions centuries ago and indeed much of the plateau bears evidence of volcanic action. Much of the soil is therefore volcanic, but there are extensive drift deposits of gravel, sand and clay and rich alluvial areas along the rivers, besides the familiar red soil

so common in the highlands. When well watered the country is almost everywhere fertile, and even in the arid districts much can be done by irrigation.

With all this variety of soil and altitude there is naturally a wide range of climate, but it falls roughly into two classes, the tropical climate of the lowlands and the temperate climate of the highlands. The former may be defined as a climate in which the European, if he wishes to remain healthy, must take precautions, not so much on account of the heat but because of the various tropical diseases which abound at low altitudes. The tsetse fly, for instance, carrier of the dreaded sleeping sickness, is rarely found above 3,500 feet, and malaria, though now spreading to the highlands, originates in low-lying swamps and marshes where mosquitoes can breed.

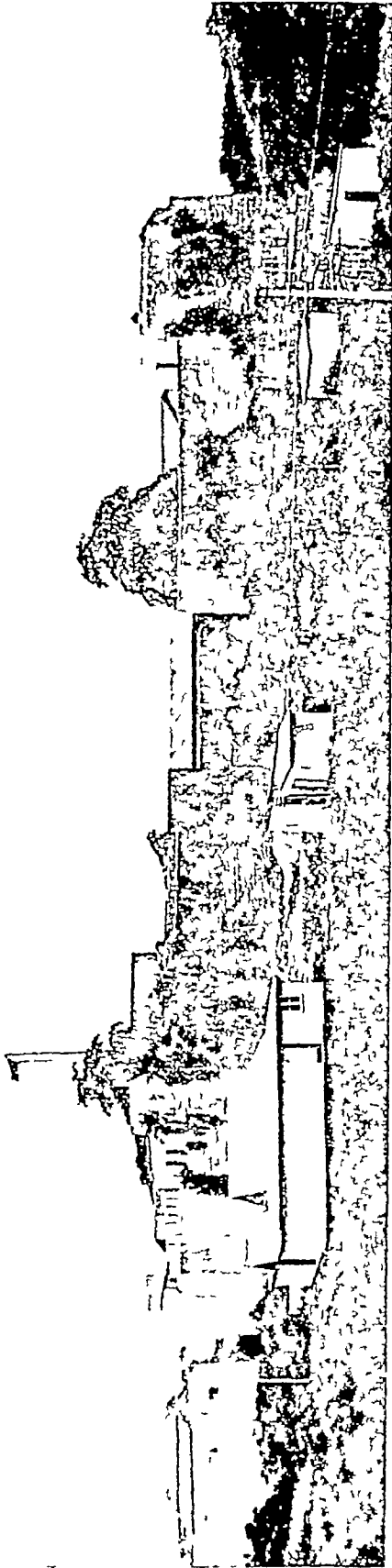
In the highlands the climate is delightful and Europeans thrive, if they take the ordinary precautions



E N A

LOOKING DOWN THE RUA ARAUJO IN LOURENÇO MARQUES

Lourenço Marques, on the western shore of Delagoa Bay, superseded the old town of Mozambique as the capital of Portuguese East Africa in 1907. Its harbour is considered one of the best in South Africa, and derives the bulk of its transport trade from the Transvaal. Rua Araújo is the principal business street and here land is reputed to have changed hands at £14 a square metre.



OLD PORTUGUESE FORT ON MOMBASA, AN ISLAND CRADLED IN BASTIONS OF CORAL OFF THE EAST AFRICAN COAST. Mombasa, with its two harbours, is the principal port of Kenya Colony and Protectorate, and is situated on a coral island connected with the mainland by the Uganda Railway. Its most prominent building is the massive fortress, which, erected in 1593-4 by the Portuguese, has seen many bombardments and is now used as a prison.

months are during the rains according to the warmest period is just before

To turn for a moment to what be termed climatic freaks, especially in the Ruwenzori produces thunderstorms of violence, Mount Kenya, Ruwenzori have violent while the southern coasts of are sometimes visited by cyclones the Indian Ocean

Like the climate the with the altitude, and is greatly by the rains. Virtually the belongs to the region of which occupies the eastern tropical Africa in contrast great forest lands of the west and. At the end of the dry season these lands are reduced to the tinder with great areas bush-fires, and within a week of rains breaking new grass is up everywhere, elephant grass as high as twelve feet

These variations are seasonal, the variations caused by the are permanent. Along the and in some of the low-lying of the interior, the vegetation, natural and artificial, is purely this passes almost imperceptibly the typical grass country Central Africa, endless grass height and luxuriance according aridity or otherwise of the broken only by that most tree of Central Africa, the acacia, and above this again a temperate vegetation short grass and comfers, where fruits and flowers flourish.

Speaking generally, it cannot that this area is well the forest lands of Africa are into the Congo and Niger important forests are to be found the high mountain ranges. In for instance, the girdle forests Elgon, Mt Kenya and the the Mau Forest are the most Uganda has densely forested



APRIL 1911

SNOW-CROWNED RUWENZORI CLAD IN EXUBERANT FOREST VEGETATION

Amid deep and almost impenetrable forest the Ruwenzori (Snow-Crowned) Mountains, one of the most of the ancient, rise in the western part of the East African tract of Uganda. Their steep slopes abound in vegetation of wild tropical brilliance and among the tangled and interwoven undergrowth interspersed with enormous trees, there are animals and birds of wonderful variety.



Major G O Hill

PICTURESQUE WATERHOLE IN NORTHERN JUBALAND, THE NORTH-EAST PROVINCE OF KENYA COLONY

Many a wild, inhospitable portion of Jubaland has still to be trodden by the adventurous foot of the explorer, what land has been tamed is, on the whole, unsuitable for agriculture and the scattered nomadic Somali population of the interior assist little in the cultivation of the soil. The climate is tropical, but the rainfall scanty and water is rarely seen in the bed of the Lag Dera, which for years at a time remains a dry watercourse. Swamps wells and waterholes however, in certain parts and along the Juba river the accompanying belts of foliage harbouring many baboons, while the tsetse fly occurs in not a few

the Ruwenzori range some never yet penetrated by man. Tanganyika has similar girdle forests on Kilima Njaro and in Nyasaland the cypress forests of the Manje plateau should be noted.

As for crops the most important if not at the moment at any rate in the near future is cotton. Every year America uses more of her own cotton and accordingly there is an urgent need for the development of cotton grown within the British Empire. In Uganda where the government encourages the natives to grow cotton on their own plots, issuing seed and sending out instructors there are 150,000 acres under cultivation and the German in Tanganyika fostered the industry by similar methods which are being continued by their successors. In Nyasaland, after many setbacks cotton growing is now well established but in Mozambique it can hardly be said to have got beyond the experimental stage.

Progressive Home Industries

In Kenya the chief industries are coffee and sisal. Flax has had its ups and downs, and may eventually come into its own. The population is now being fed on its own wheat and the production of sugar is increasing. Dairying shows prospects of development. In the native areas attention is being directed chiefly to the production of cotton and oil seeds. Coffee is also grown in Uganda, in the Kilima Njaro district and in Nyasaland but in the last named pride of place must be given to tobacco while the premier industry of Tanganyika just before the Great War (and now recovering again) was the cultivation of sisal hemp. In 1913 nearly a quarter of the total land under cultivation was given up to sisal which was found to do well up to 3,000 feet, and one of the four German sisal companies paid in dividends as much as 50 per cent.

Mozambique has a range of agricultural possibilities which includes almost every variety of tropical and sub-tropical product, with ample labour and

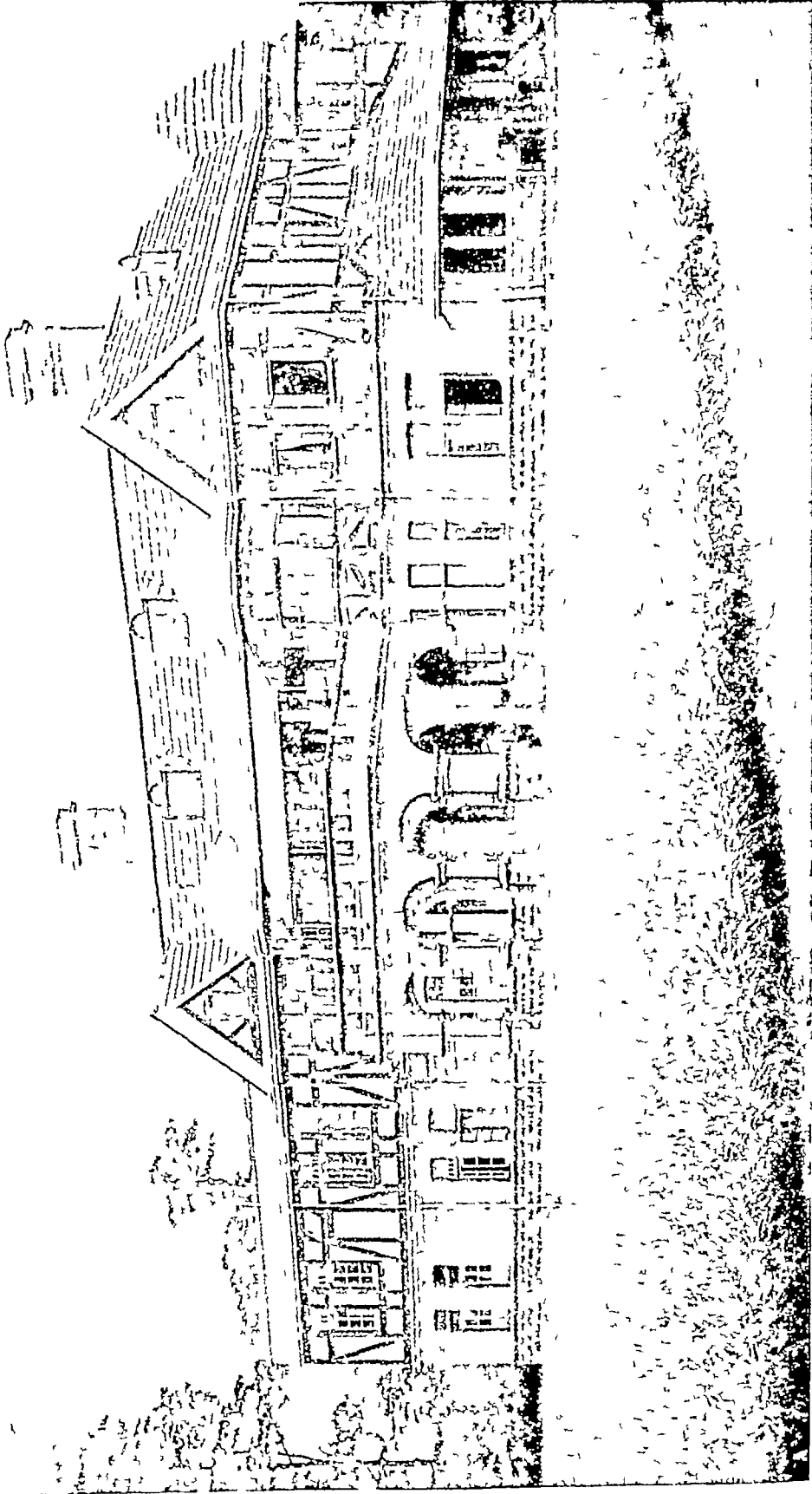
good rainfall but it cannot be said that the Portuguese have made much use of their opportunities, their chief product being sugar which accounts for more than half the total value of exports.

Potentialities for Stock Raising

At first sight the area with its rolling grass land would appear to be an ideal cattle country. Except in the tsetse fly belt stock diseases such as rinderpest, pleuro-pneumonia and East Coast fever exact their toll but fortunately are amenable to control and treatment by scientific method of inoculation and dipping. The glut in the world markets prevents the development of an export trade in beef and beef product. The natives own large numbers of live stock which play an important part in their social system and largely form the basis of measuring wealth while possession thereof is generally a necessary qualification for entry into the marriageable state. To an increasing degree meat and milk are being used by the natives for food purposes and in the case of the Masai tribe the blood of oxen is tapped from the live animal for use as food. In Kenya only do horses thrive. Good progress is being made in the grading up of stock of native types with the use of sires of recognized European breeds, largely the result of initial efforts made and assistance rendered by the government through its experimental and stud farms.

Univalued numbers of Big Game

Disease indiscriminate shooting the onward march of civilization have greatly diminished the vast herds of wild animals which used to be found almost everywhere but even so there is no region in the world which possesses such numbers and variety of game. Elephant the largest of living animals and the most hunted for the sake of its ivory, buffalo the most dangerous of all created things, hippo in the lakes and rivers, rhino not so universal but abundant enough in certain areas as for instance round the north end of



GOVERNMENT HOUSE ON GOVERNMENT HILL IN NAIROBI, A MODERN CITY OF EAST AFRICA

Nairobi, the administrative capital of Kenya Colony, is a flourishing centre, situated on an elevated plateau, 5,450 feet above sea-level. Lying on the Uganda railroad, 330 miles from Mombasa, it was but a railway settlement in 1899, since which date the town has been raised on generous lines and 42 miles of road have been constructed, while the population is estimated at over 20,000. The town, though still in course of construction, contains many buildings of pleasing appearance, including Government House which, together with the Civil Hospital, Nairobi Club and several handsome residences, stand on a hill overlooking the town.

Lake Manyara lion mis-called the king of beasts and his fiercer cousin the leopard hyenas and jackals the scavengers of the wild rare animals seldom seen of man such as the okapi and the bongo reيرا of several varieties antelopes and gazelles of innumerable kinds from the giant eland

naturalist and the hunter but a source of revenue to the state so that the game is now everywhere strictly preserved not only in reserves generally situated in areas which are useless for other purposes as for instance in the Rift Valley south of Lake Malawi but by means of game licences.



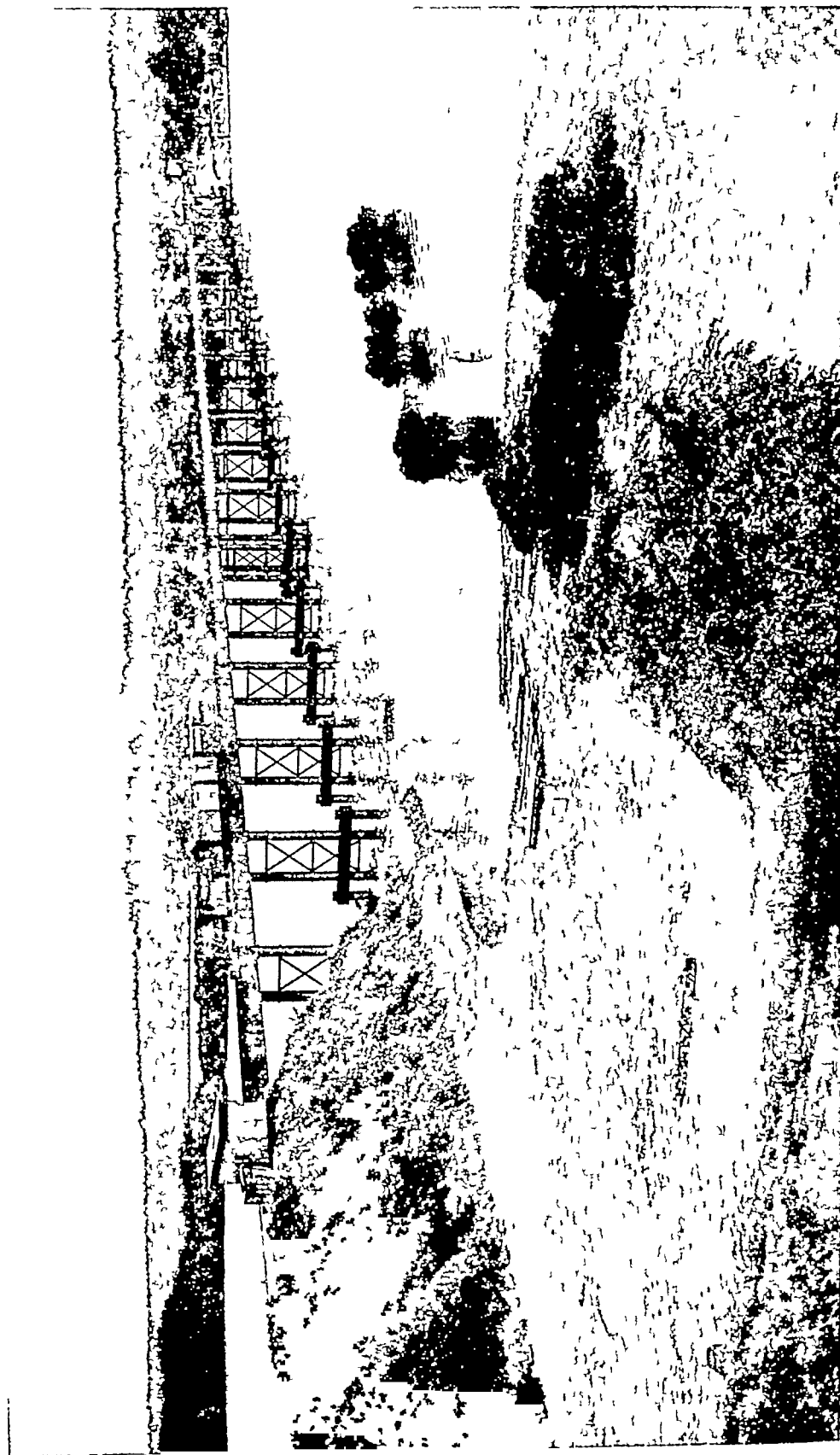
NATIVES OF UGANDA BRINGING SEED COTTON ACROSS LAKE KIOGA

Cotton is the principal cash crop of Uganda where it was first planted in 1907. It was stimulated by the British Cotton Growing Association, has shown continuous advance and promises to become a leading economic industry. The output for 1923 is estimated at 100,000 bales of 400 lb. some 10-15% of the crop coming from between Lake Kioga and Mt Elgon.

to the tiny dik-dik wild-dogs, wart hogs, giraffes, crocodiles and monkeys and a wide selection of birds are all to be found within its boundaries.

Space does not permit of a review of all the "good game countries" but some mention should be made of the great crater of Ngorongoro in Tanganyika, a vast natural game-pit some twelve miles in diameter the home of more than 50,000 head of game the blue wilde-beeste predominating and of the teeming plains around Lake George in the Ruwenzori country. All over the area under consideration the authorities have woken to the fact—and that none too soon—that the fauna is not only of interest to the

In sharp contrast to its wealth of fauna East Africa as a whole cannot be said to be rich in minerals, though no doubt an exception will be found to a certain extent has been found already in Tanganyika besides the great gold mine of Sekenke on Iramba plateau other quartz reefs have been discovered which should prove valuable and in the opinion of experts a conglomerate formation similar to the Rand will be found to exist. Mica also has been considerably worked and there are indications of oil. Mozambique too has mineral possibilities—there are for instance numerous veins of auriferous quartz in the region round Massakess—though only a very small area has been geologically



E. N. A.

SALISBURY BRIDGE, OF THE UGANDA RAILWAY, LEADING FROM MOMBASA ISLAND TO THE AFRICAN MAINLAND

Begun in 1895 and completed in 1903, the Uganda Railway of metre gauge with a length of 587 miles, links Mombasa on the sea coast with Kisumu on Lake Victoria. Leaving Mombasa Island the line reaches Kilindini on the mainland by the Macupa or Salisbury Bridge, a fine structure of seventeen spans opened in 1899 and traverses magnificent highland and lowland scenery. Beyond Nakrobi the railway suddenly dips into the Great Rift Valley after which it attains its highest altitude of 8 320 feet on Mau Summit and then begins the descent to Lake Victoria, 3,726 feet above sea-level on which steamers are run.

surveyed. But in Nya Ndi and Uganda and Kenya the minerals are comparatively lacking, next to the exception of the apparently inexhaustible supply of asbestos which is found in Lake Malawi which is expected to reach an annual output of 500,000 tons.

The entire question of communications and industry is in its infancy, as compared with the highly organized mechanism of Europe, and depends for its improvement on transport, the most vital need in East Africa to-day. In contrast with the Belgian Congo, next door to it, area it undoubtedly in having no great waterway, though in the near future something may be done with the Nile route. Steamers ply on the Great Lakes but touch only relatively small and unproductive areas while going to and from, so the chief method of communication is by railways which are as yet few and far between. The Uganda Railway runs in the north, the Central Railway in Tanganyika Territory, the Shire Highland Railway between Blantyre and Chinde in the Zambesi connected near Lupat with Beira by the Trans-Zambesia Railway

and the lines from Lourenço Marques and Beira to Pretoria and Salisbury respectively at its extremities.

Telegraph lines are more frequent though the native population for wire-communication is a serious handicap to their efficiency in some districts. In Northern Uganda has a remarkably fine telegraph system.

Of towns the most important is Nairobi the capital of Kenya, Kenya is the commercial centre of Uganda, Blantyre and Zomba in Nyasaland and on the coast Mombasa the port-way of East Africa and the terminus of the Uganda Railway built in 1902 and which is felt to be the inadequate harbour of Kilindi. Dar-es-Salaam the well-planned exception of German East Africa, Chinde, Beira and Lourenço Marques. The latter situated on the north shore of Delagoa Bay was once notorious for its unhealthyness but in 1900 the town swamp was filled up and it now compares well with other similar places, alone the coast and possesses electric light, tram, theatres and magnificent railway station.

EAST AFRICA GEOGRAPHICAL SUMMARY

Natural Features. Typical African a piece of the part of part of the ancient Gondwanian land, dropping more or less abruptly to a coastal lowland. The plateau is bounded by the Rift Valley with volcanoes on the edge of the disturbed area. Except Victoria the lakes are rift lakes usually long, narrow and deep.

Climate and Vegetation. Basically the climate is tropical with no great seasonal or diurnal variation in temperature with rain about the period when the noonday sun is highest in the sky with tropical short period downpourings and a liability to intense storm. The vegetation is fundamentally tropical, with jungle and coastal mangrove swamps. On the higher ground the plateau, the rains are less the skies are clearer the mean annual temperature is low and though seasonal variation in temperature is small the daily range is great wherever the clear night sky permits radiation, the peaks are mist hidden and sometimes snow-clad. The vegetation on the high ground is savannah grassland the mountains are forest, girdled with upland pastures above the trees. (Cf. Brazil.)

Fauna. One of the world's great hunting ground for elephant deer of numerous kind, hippopotamus and rhinoceros lion and leopard. Typical African diseases due to tsetse flies and other causes prevent the wide raising of domestic animal and East Africa lacks the cattle of Queensland or South Brazil.

Products. Soda from Lake Magadi, the chief mineral. Cotton (Cf. Nigeria, Rhodesia and Queensland). Coffee (Cf. Beira). Sisal hemp sugar.

Communications. Transport facilities except for the few railways, depend on human portage save where the lakes may be used. The whole area needs road motor lorries and motor cars.

Outlook. The question of the Hindu settler and the need of transport services are of immediate importance. These difficulties surmounted there remain the problems of the fly-carned diseases and the unprogressive and almost useless native labourer. Rubber coffee cotton plantations, spread over wide areas wait for success upon the solution of these important problems.



Hinderwood

VALLEY OF QUITO ENCIRCLED BY TOWERING ANDINE HEIGHTS

An unforgettable sight is Quito seen from the slopes of the colossal snow-capped volcanoes which overlook this capital of Ecuador. Situated some ten miles south of the Equator, 9,350 feet above sea level, the general appearance of the city is delightful in the extreme with its red-tiled roofs and white walls glistening in the sunshine against the mountain background of a majestic Cordillera of the Andes.

ECUADOR

Andine Wonderland of Varying Climates

by C. R. Inock

Author of "El Anden and the Amazon"

ECUADOR derives its name from its position northward of the Equator and though anyone, the smaller South American states is by reason of its natural features one of the most interesting on the continent. From a tropic sea and we may rise in a few hours' journey to one of the most stupendous mountain assemblies in the world, an avenue of cyclone peaks, a bonanza river, or in civic culmination above the perpetual snows, and terminating up in the highest of snow-capped peaks, the ancient city of Quito. Beneath these perpetual snows lie fertile valleys in a region of perpetual spring where fruits hang ready for the taking, or in the annual world the all-storied living in the history of the Guayas river exhibit nature's contrast with the graceful llamas of the high uplands or paramos.

The republic faces upon the Pacific coast, where the continent extends furthest west into the ocean. On the north and northeast its neighbour is Colombia, and on the south and south-east Peru. The territory is thus of a triangular form, its base on the coast, its apex some 500 miles inland beyond the Andes, in the forested region of the Amazon basin. The boundaries on almost every side have been in dispute and the area cannot be more than very approximately stated as between 116,000 to 276,000 square miles, depending upon the inclusion or otherwise of disputed territories, which lie mainly in the Amazon or Montaña region.

Zones of Diverse Climate

Ecuador is thus a land of three very diverse topographical and climatic zones, namely, the Pacific seaboard a region of often meandering rivers watering tropical woodlands and plantations

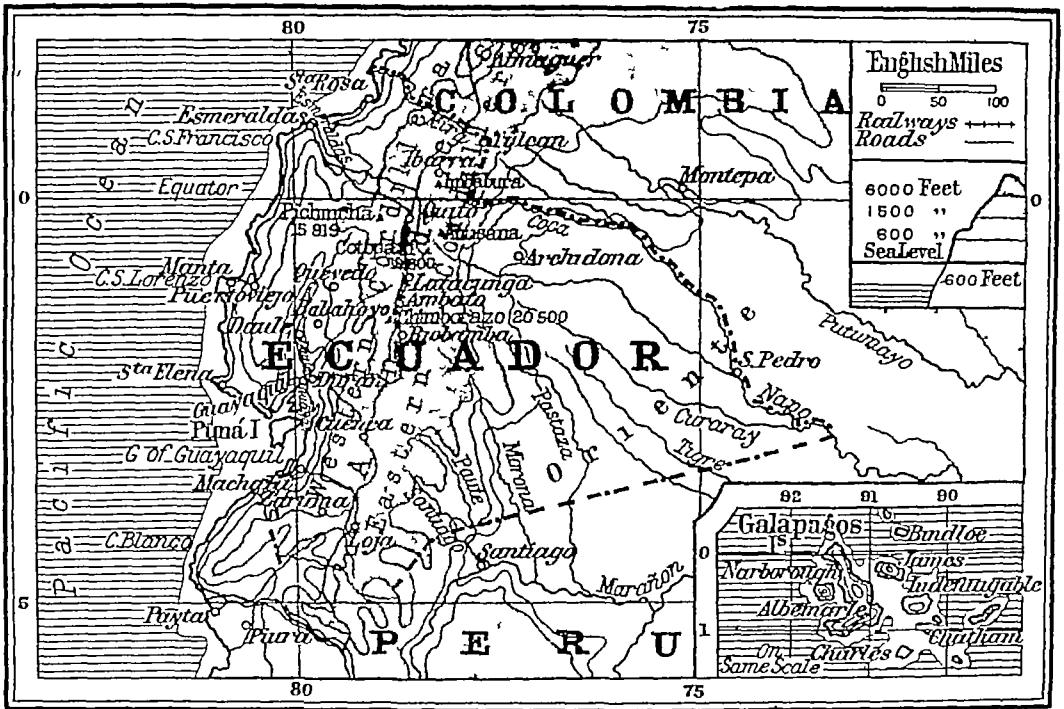
the Andes or Cordillera a region of high, the great tableland, track, and meadowland but broken by fruitful valleys, worked by the heavy rainfall, and third the forested and partly irrigated region of the Amazon tributaries. We may consider these divisions in some detail.

Topographical Divisions

The coastal zone, embracing much of the coast line, is about 400 miles long. Its principal feature is the Guayas river which in fact is the only fluvial system of primary importance upon the whole western coast of the continent. The coast generally is a land of great sea-girtning, here broken by the great Gulf of Guayaquil into which the river empties, with the island of Funda at its mouth.

The Guayas river system irrigates the extensive and fruitful region between the Andes and the sea, the richest belt of tropical territory on the South American coast and with its tributaries has an aggregate navigable length of more than 200 miles, serving the cocoa, coffee and other plantations which form the principal source of native wealth and commerce. River craft of various kind, from teamers to canoes, traverse these waterways, and there are curious native sailing rafts which make alternate use of tide current and wind in their journeys. The seaport of Guayaquil—it lies 800 miles south of Panama and is the chief harbour upon a seaboard 2,000 miles long—is situated 30 miles from the sea, the river being in places tortuous, narrow and subject to shoaling, and so not always affording plane sailing for the ocean liner which calls there on its journey from Panama to Callao and Valparaiso.

The principal affluents of the Guayas, all of which enter above this point, are



ECUADOR'S GIGANTIC CORDILLERA 'TWINX PAMPA AND PACIFIC

the Daule or Bodegas, the Yaguachi or Chumbo, the Vinces or Quevado and the Caracas or Sapotal. In the northern portion of the littoral the Esmeraldas is the principal river, followed by the Mira. In these river valleys, especially that of the Guayas, the quaternary soil which has been brought down by the current is of great fertility, and has formed the coveted bancos or deposits, which are covered with cocoa-producing haciendas.

Reaching now the uplands, whence these rivers have their rise, traversing often areas of dense woodland in the foothills, we remark the structure of the Cordilleran region. The Andes of Ecuador consist of two main ranges, the western or Cordillera Occidental, and the eastern or Cordillera Real. Between them is a tremendous valley, flanked on either hand by the great peaks or snow-covered volcanoes. The principal among these are, on the east Cotopaxi, 19,600 feet, the highest active volcano in the world, with ten companions ranging downwards to 15,000 feet, and on the west Chimborazo, 20,500 feet elevation, with seven companions ranging down to 14,000 feet. Among these last

is Pichincha, the "boiling mountain," whose eruptive activities have rendered it an object of dread from time immemorial, but the summit may be reached on horseback, when it is said the rise and flow of the red-hot lava lake in the crater may be seen, and the excursion is a favourite one of the good people of Quito. However, the great Cotopaxi with its unrivalled cone (reminiscent of Fujiyama), beautiful in its symmetry, with its unceasing smoke column, is the most destructive and has periodically devastated the countryside.

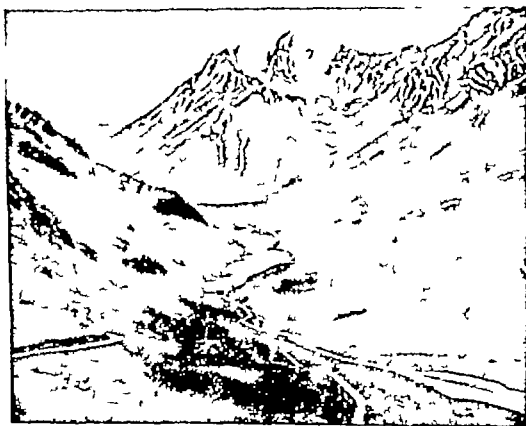
The great valley dividing the two ranges forms the boundary between the ancient rocks of the eastern geological system and the Mesozoic beds of the western, the first-named being of gneiss, mica and other crystalline rocks, and the second of porphyritic, eruptive and cretaceous formation. The two parallel ranges are joined by "nudos" or knots, an articulated system forming well-defined "hoyas" or basins, which have their hydrographic outlet alternately to the Pacific and Amazon-Atlantic watersheds, a curious natural drainage system, the three principal basin-plateaux being those of

Quito, Ambato and Cuenca respectively with a general elevation above sea level of 6,500 feet to 7,500 feet and containing some of the principal towns of the republic.

Descending from these high elevations we reach the Mantahu, as the forested region of the Amazon is modestly termed. It is in great part a wild and little-known territory in some districts the home of tribes of more or less savage Indians, but its potential economic value is very considerable. The principal rivers which traverse it are the Llanito Morona La Torre, Tuziguan, Napo and (territorially disputed) the Putumayo, all with numerous branches. These rivers are navigable in the aggregate for many hundreds of miles by small steamer and canoe and falling into the Amazon provide valuable communication with the outside world.

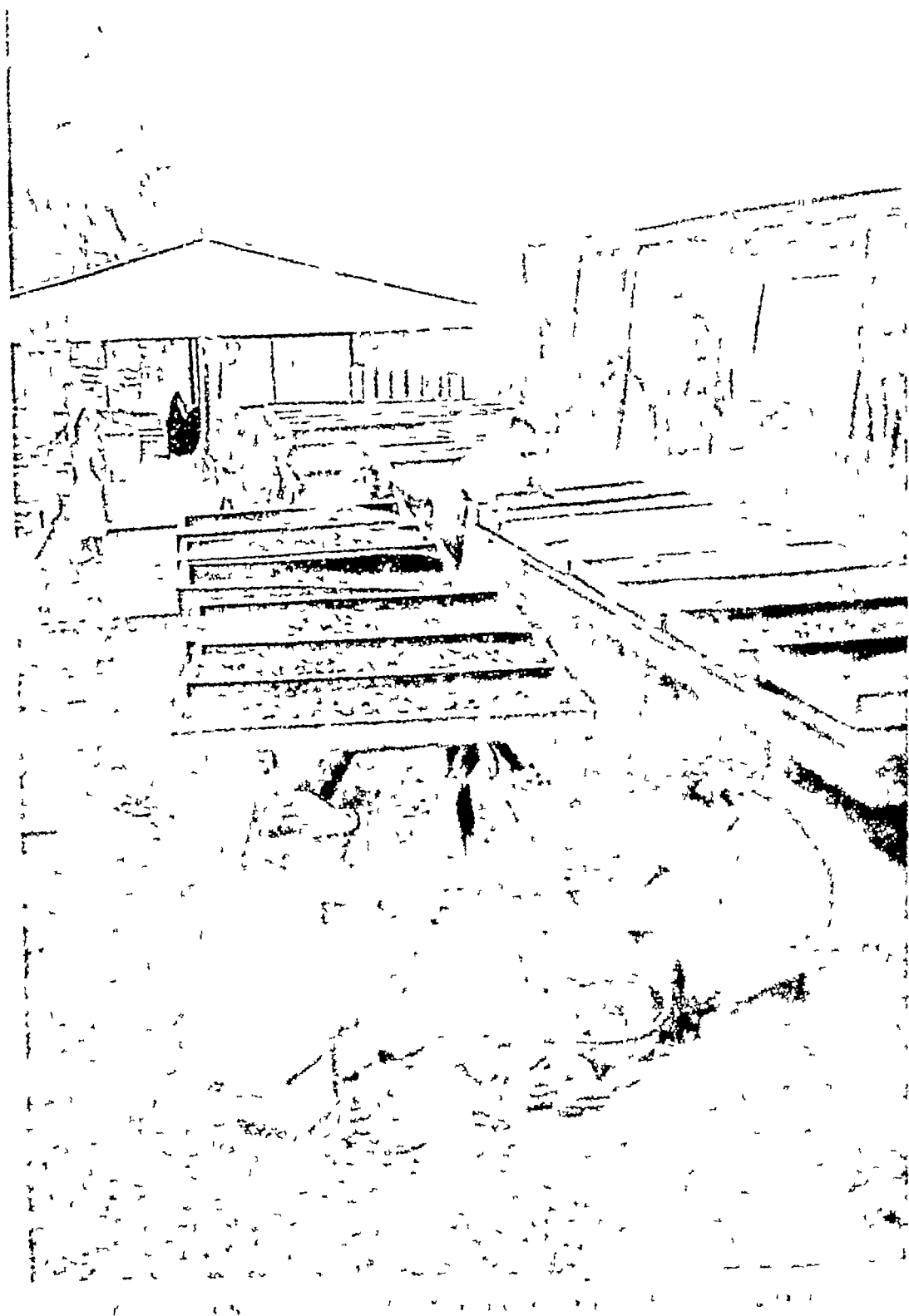
The climatic conditions of Ecuador are extremely varied the result largely of differences of elevation. All the climatic zones of the earth may be passed by going up from the coast to the mountain summit. However there are changes due to other causes. The Pacific coast of South America south of the Equator is generally barren and rainless except in the extreme south.

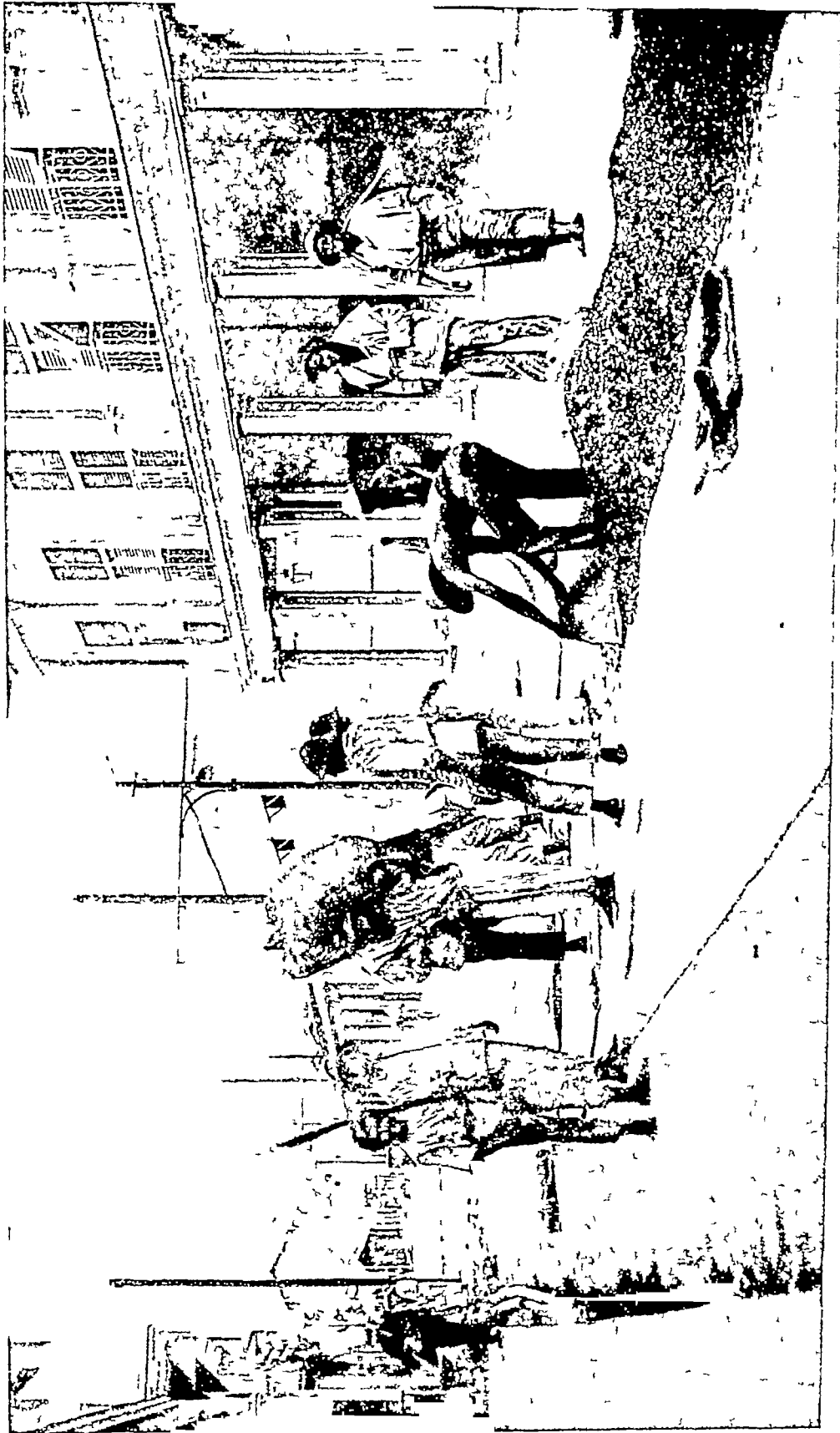
The aridity is a result partly of the steady off-horizon winds and partly of the effect of the Antarctic or Peruvian current of cooler water flowing up the coast extracting the humidity from the sea breeze. Thus it is that the southern part of the Ecuadorian littoral is dry like that of Peru, but not so the northern or the Colombian coast for the outward bulge of the continent turns the current seaward and so we find the northern littoral subject to heavy



HEADWATERS OF A RIVER IN A HIGHLAND REGION OF ECUADOR

1. The high mountain in foreground which traverses Ecuador rises numerous times, including several of the highest peaks of the Amazon. An unparalleled assemblage of magnificent scenery is kept in the general stupendous structure of this land. It contrasts towering mountains overlooking deep gorges, snowfield gleams, box tropical forests and barren steppes alternate with fertile valley.

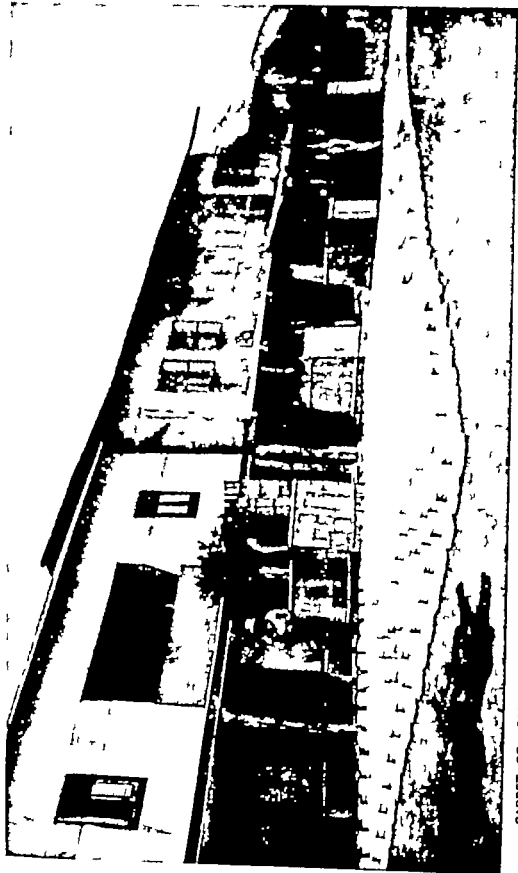




Alex McKay

DRYING CACAO IN A STREET OF GUAYAQUIL, THE MAIN TRADE AND SHIPPING CENTRE OF ECUADOR

Cocoa, or more correctly cacao, that "excellent West India drink called chocolate," was first brought over to England from the West Indies in the sixteenth century, shortly before the introduction of tea and coffee. Ecuador is now one of the world's principal producers of cacao, which forms the most important export of the country and finds its way to many foreign lands through the city of Guayaquil. Extensive cacao plantations are situated on the alluvial soil of the broad coastal plain which is richly tropical and humid in character and although the fruit is ripening all the year round the two main harvests occur about June and December



CARPET OF PANAMA HATS SPREAD TO BLEACH IN A VILLAGE STREET UNDER THE ECUADORIAN SUN

The so-called Panama hat, light hat which, as he folded without injury, made from the fibers of the palm tree, is produced in the Central America and growing principally in Ecuador and Colombia, but is also made in the United States and the Philippines. The making of the Panama hat from the fine toquilla fiber and the weaving of the hat is an industry located in the



Underwood

NATIVES OF ECUADOR COLLECTING SNOW NEAR THE EQUATOR

The valley of Quito is surrounded by numerous volcanoes, no fewer than twenty lofty peaks can be counted from the city, several of them rising far above the snow line. One of these, Pichincha, or the "boiling mountain," about 15,910 feet high, is notable for its perilous proximity to the capital which in bygone days its destructive eruption covered three feet deep with ashes and stones.

rainfall with accompanying denser vegetation, and often lined with mangrove swamps.

The heaviest rainfall is in February and March. The temperature in Guayaquil is at times extremely sultry, the highest mean is, however, given at 76° or 80° F, in the months above mentioned, and the general range from 66° to 95°. There are often fresh breezes from the sea to temper the heat. Inland, few meteorological observations have been regularly taken, but it has been found that the temperature falls in proportion with elevation at the rate of 1° F for every 330 feet, and in

Quito the visitor will at times be complaining of the cold. The mean annual temperature here is given as 55° to 59° F, with a diurnal variation of 10°.

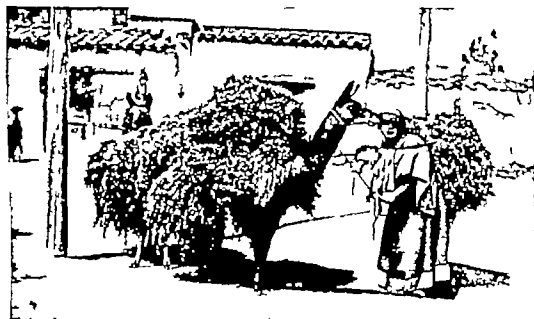
In the Oriente or Montaña the heat often becomes oppressive, but there is a wide diurnal variation. The seasons in general are divided into "invierno," rainy or winter, and "verano," dry or summer, the latter from July to December. In Guayaquil yellow fever has been stamped out, largely as a result of the influence of Panama, but malaria is a troublesome affection generally upon the coast, and indeed elsewhere. The uplands are in general healthy, or at

least as regards natural conditions. The natural vegetation of Ecuador follows in species upon the orographical and climatic variations. Upon the littoral the prominent feature is the sombre manglares or mangrove thickets which clothe the shores, and whose timber is of economic value. The coco-palm affords a graceful relief and flourishing best on the salty soil near the sea, nevertheless grows up to the foot hills, but is very little cultivated artificially notwithstanding the commercial value of its products. The algarrobo yields valuable timber as do the ebony and the roble, whilst the great bombax ceiba yields a vegetable wool. The tamarind is one of the finest trees. Most of the trees of the littoral are deciduous and so the forests of this zone are largely naked in winter. The toquilla palm yields the leaf fibre for the famous

Panama hats of Ecuador whose making is a remarkable indigenous art. Most valuable commercially is the cacao or cocoa tree while bananas form a considerable article of trade. Midway up the western forested slopes

the cinchona or quinine shrub flourishes and up to 10,000 feet these forests are rich in flowering shrubs as also in fuchsias, mimosas, lobelias, gloxinias whose flowers beautify their virgin woods. Then the palms and other subtropical plant life disappear as we enter upon the colder uplands, where the cacti flourish and low shrubs in the ravines, until the sterile uplands or paramos unfold to the view. Crossing the Andes and descending to the Amazon region leaving behind extensive pajonales of the valuable natural fodder of the ichu grass, we encounter the belt of cinnamon-bearing shrubs, or canchali with many species of trees as enumerated upon the western slopes while the Brazilian mahogany also occurs.

The indigenous fauna has a wide range many species of monkeys and the puma, jaguar a beautiful fox, a bear the tapir—the largest indigenous mammal the peccary the llama—the only native ruminant and domestic animal while there are also alligators, anacondas and turtle. Bright plumaged birds in the tropical zones are



MUCH VALUED PACK ANIMAL OF THE ECUADORIAN INDIAN

ALVA M. KAY

The streets of Quito present a riot of life, for among the population of nearly 100,000 many races are represented. The Indian element in broad bonneted hats and bright ponchos, which lend much animation to the scene, contrasts strikingly with the official class in imported garments of fashionable cut, and smart horse-drawn carriages thread their way among llamas, mules and oxen.



Dr. G. Sheppard

VIEW OF DAULE, A SMALL VILLAGE ON A RIVER OF THE SAME NAME IN THE INTERIOR OF ECUADOR

Peñón, a land of lofty mountains, is so named because the equatorial line crosses the northern part of the country. Although a well watered land, with no fewer than ninety rivers, most of its waterways are so short and swift that they are of little commercial value. Among the navigable streams flowing westward through the Cordillera to the coast washed by the great Pacific Ocean the Guayas with its tributaries is the most important. The Daule, on which the village of Daule lies some miles north of Guayaquil, is another navigable river rising on the western slopes of the Andes and flowing south to Guayaquil where it joins the Guayas.



BY THE QUAYAQUIL-QUITO RAILWAY BENEATH THE WATCHFUL EYE OF A GLORIOUS SENTINEL OF THE ANDINE WORLD
 The famous Guayaquil-Quito railway so notable among Ecuadorian shareholders was built by American engineers. It is the chief transport and commercial city of Ecuador, lying on the Pacific coast. The small station on the line which signals up the Andean plateau and river valley is an interesting sight. In the distance the great Chimborazo over 14,000 feet high rises above the clouds.

in contrast with the sad-coloured specimens of the upland ornithology

In mineral wealth, as far as mining is concerned, Ecuador must be described as being poor. Gold exists at Zaruma, near the coast, and has been extensively mined in that particular locality, and elsewhere there are some small placer washings. Many metalliferous minerals exist, but not in commercial quantities, but the petroleum fields of the coast are of some considerable importance, as on the Santa Elena peninsula, and these are exploited by a British company.

The industrial life of the republic is comparatively little developed, the cocoa and other plantations on the coast and the pastoral industries of sheep and cattle rearing of the uplands forming with forestal pursuits, the primary occupations. The principal articles of export are cocoa, coffee, tagua, rubber, "Panama" and other straw hats, bananas and other fruits, cane and timber, hides and a little gold.

The rate of pay of the workers in town or country is in general very low, a result in large degree of the relative poverty of the country, but there is no hard or fast colour line. A further barrier to the more efficient development of the country is the lack of extensive railways and roads. The Quito-Guayaquil Railway is a valuable means of communication between the seaport and the uplands and the capital. The line is 290 miles in length, with a ferry across the river from Duran to Guayaquil.

The principal towns of Ecuador are, in order of population, Guayaquil, with about 100,000, Quito, the capital, with perhaps 80,000, Cuenca, Riobamba and Latacunga, given respectively as of 70,000, 50,000, and 40,000 approximately. Ambato, Manta, Esmeraldas and the various capital towns of the 18 provinces are all important centres of population, which for the whole country is given as about 2,000,000, any exact number being impossible in the absence of reliable estimates.

The city of Guayaquil extends for several miles along the water front, presenting a handsome appearance from the steamer, and is a busy and expanding centre. Quito, removed by elevation from an active industrial life, presents many pleasing topographical and historical features.

The Galapagos Islands, which belong to Ecuador lie upon the Equator, nearly 600 miles from the coast. There are five large islands, the whole having an area of about 2,870 square miles, and they are remarkable for the giant tortoises or galapagos, found nowhere else in the world except in the Mascarene Islands in the Indian Ocean. The species is, however, in danger of extinction by reason of the ruthless destruction by hunters. On Charles Island there is a small colony of settlers, and a penal station on another. The climate is one of the healthiest in the world, but communication with the mainland is infrequent.

ECUADOR GEOGRAPHICAL SUMMARY

Natural Divisions East, Oriente, lowlands of the Upper Amazon, middle, Andes, twin chains East and West Cordillera with the elevated longitudinal valley between, west, littoral, steep coastal edge leading to deep water.

Climate and Vegetation Throughout the tropical temperature effects (1) small annual variation between the dry and wet seasons, (2) small daily variation between day and night. Mean annual temperatures depend on elevation, 80° F on the coast, 55° F in the longitudinal valley. The coast tends to be arid, the heights experience tropical rains. Vegetation occurs in belts due to the elevation.

Communications Waterways to the navigable Amazon in the east. Railway and road in the elevated longitudinal valley (Cf Chile). Coastal steamers for the littoral.

Products Cocoa on the alluvial flats of the coastal streams. Panama hats, and petroleum.

Outlook As in the case of Bolivia the future rests with the development of the natural resources by foreign capitalists, but Ecuador lacks the attraction of large deposits of payable minerals. The cocoa trade competes with that of the West African islands (See Guinea Lands).

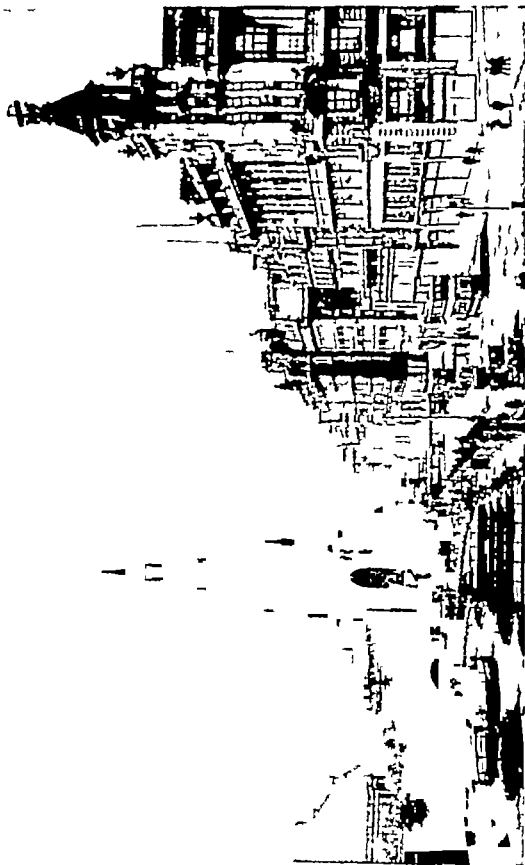


ECUADOR Perilously near the capital Mount Pichincha 15,910 feet
high is one of twenty volcanic peaks that can be counted from Quito

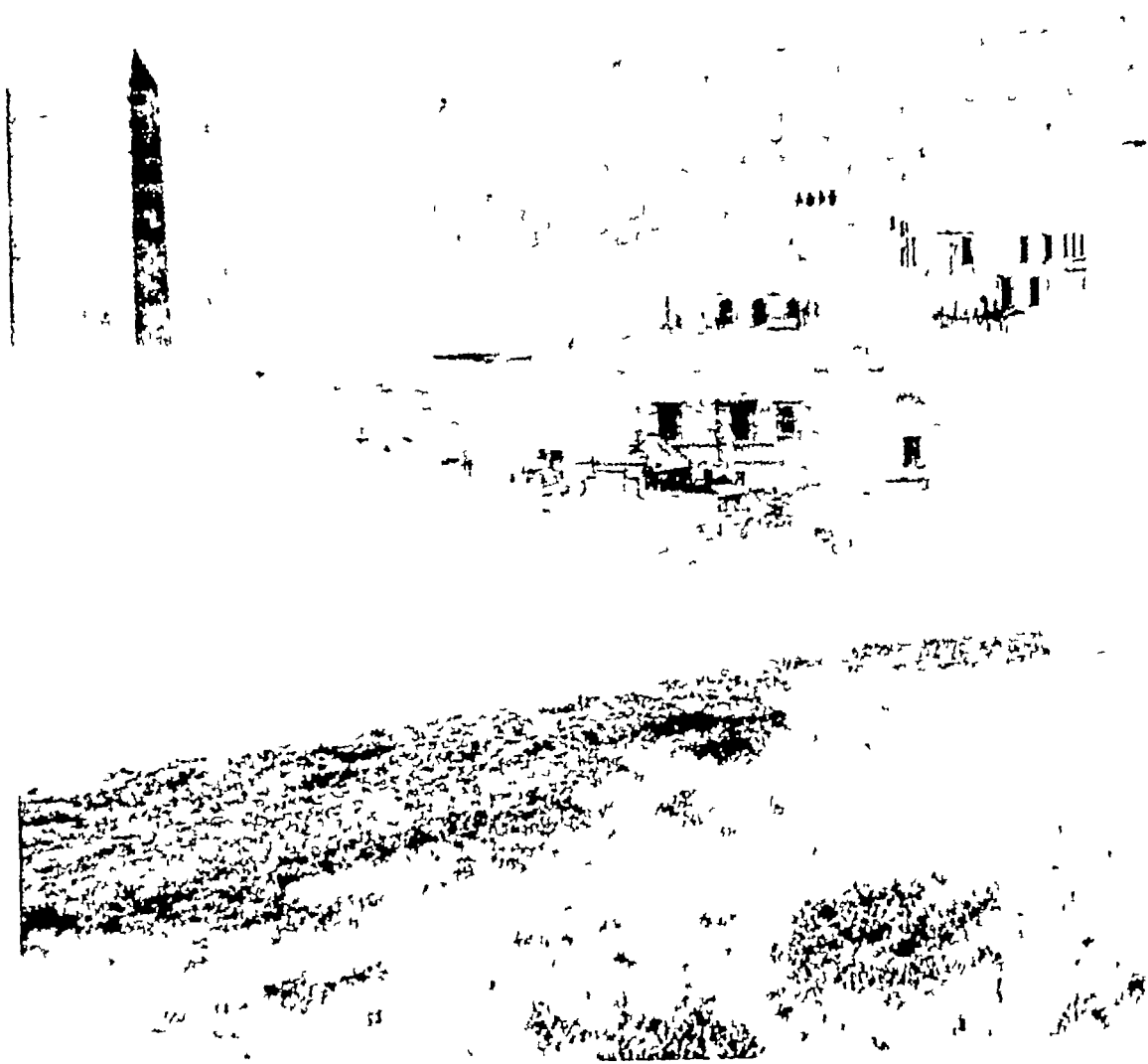
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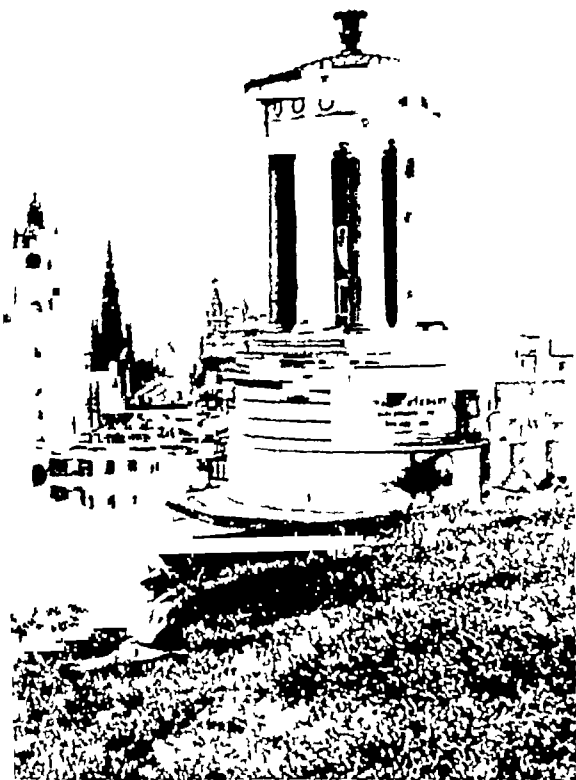
ECUADOR Thermal baths of volcanic origin have brought prosperity to Otavalo in Imbabura province, compensating somewhat for the havoc wrought by other natural forces in this earthquake-stricken region



EDINBURGH. No capital in Europe has a finer thoroughfare than Princes Street. From the single row of hand some buildings on its north side the views of the Castle and Old Town across the gardens are superb.

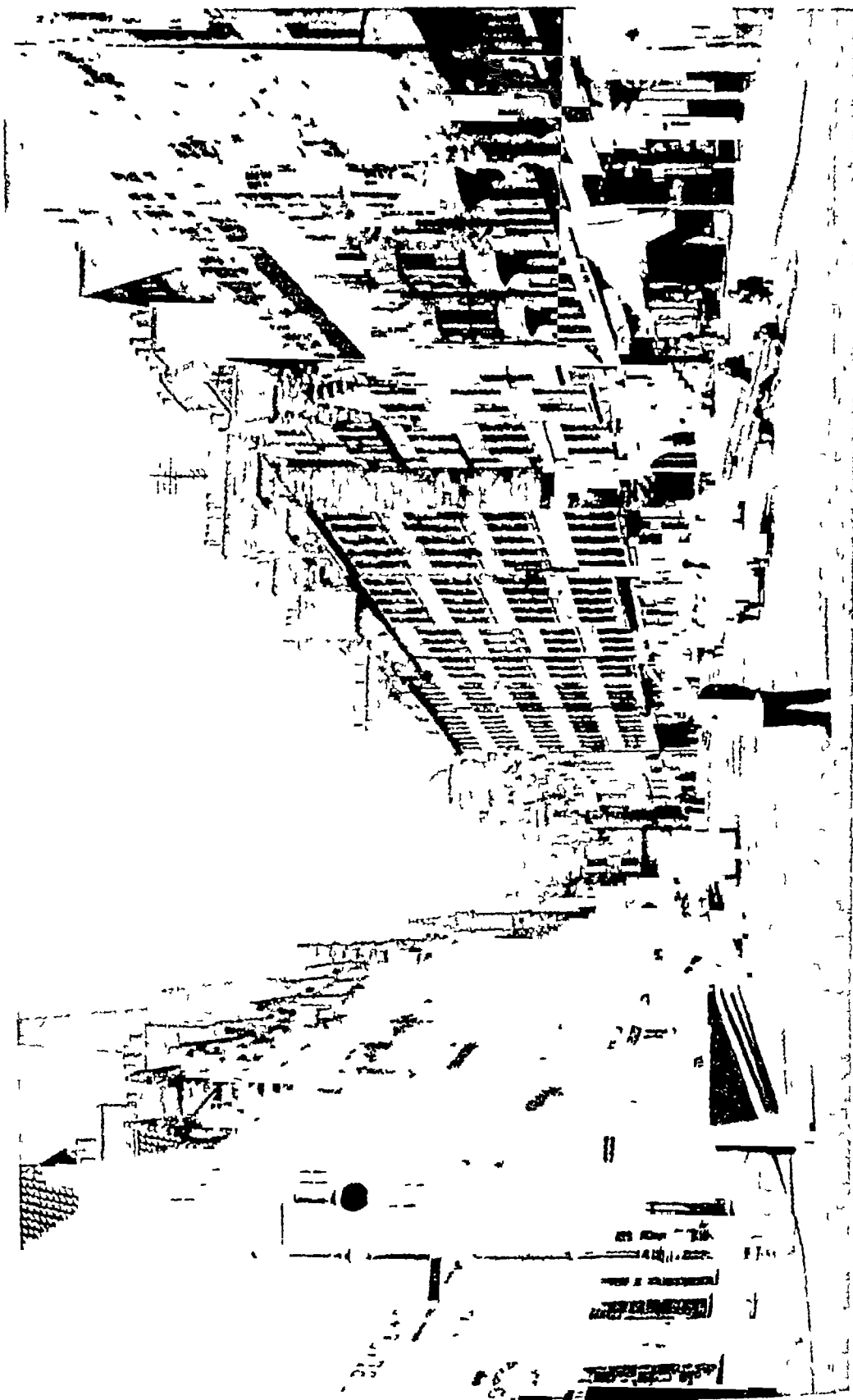


EDINBURGH *It is from the monument to Dugald Stewart on the Calton Hill, seen in the opposite page, that the finest view of Edinburgh is to be obtained*



Donald McLeod

*On the left against the sky are the spires of the Tolbooth Church and the Castle
here on the right the North British Hotel and the Scott Monument hold the eye*



EDINBURGH In the *Lawnmarket*, this portion of the long *High Street* that winds downward from the *Castle* to *Holyrood*, the cloth-sellers of *Edinburgh* formerly had their booths

Francis Oldrid Ingalls



EDINBURGH Holyrood is steeped in the glamour of romance. Only the roofless nave of the Abbey Church founded by David I remains and of the original palace the old tower for ever associated with Queen Mary



Donald McLeish

EDINBURGH Here by the west porch of S Giles' Cathedral, Scotland's crown-surmounted, history-laden shrine, rests the Heart of Midlothian

1724

EDINBURGH

Scotland's Crag-throned Capital

by W. K. Dickson, LL.D.

Keeper of the Advocates' Library, Edinburgh

SCORES of volumes have been written about Edinburgh but the unique interest and charm of the city have perhaps never been better expressed than by John Gibson Lockhart, Scott's son-in-law, in his well-known sketches, "Peter's Letters to His kinsfolk," published in 1819.

"Here," says Peter Morris, "is the capital of an ancient, independent and heroic nation abounding in buildings ennobled by the memory of illustrious inhabitants in the old times, and illustrious deeds of good and evil and in others which hereafter will be revered by posterity for the sake of those that inhabit them now. Above all, here is all the sublimity of situation and scenery—mountains near and afar off—rocks and glens—and the sea itself almost within hearing of its waves. I know no city where the lofty feelings generated by the idea of antiquity and the multitude of human beings are so much swelled and improved by the admixture of those other lofty, perhaps yet loftier feelings, which arise from the contemplation of free and spacious nature herself. Edinburgh even were its population as great as that of London could never be merely a city. Here the proudest of palaces must be content to catch the shadows of mountains, and the grandest of fortresses to appear like the dwellings of pygmies, perched on the very bulwarks of creation.

Statue of the Royal Burgh

The city and royal burgh of Edinburgh, the ancient capital of Scotland, lies on the south shore of the Firth of Forth between the Pentland Hills and the sea, 396 miles north of London. Although no longer a political capital

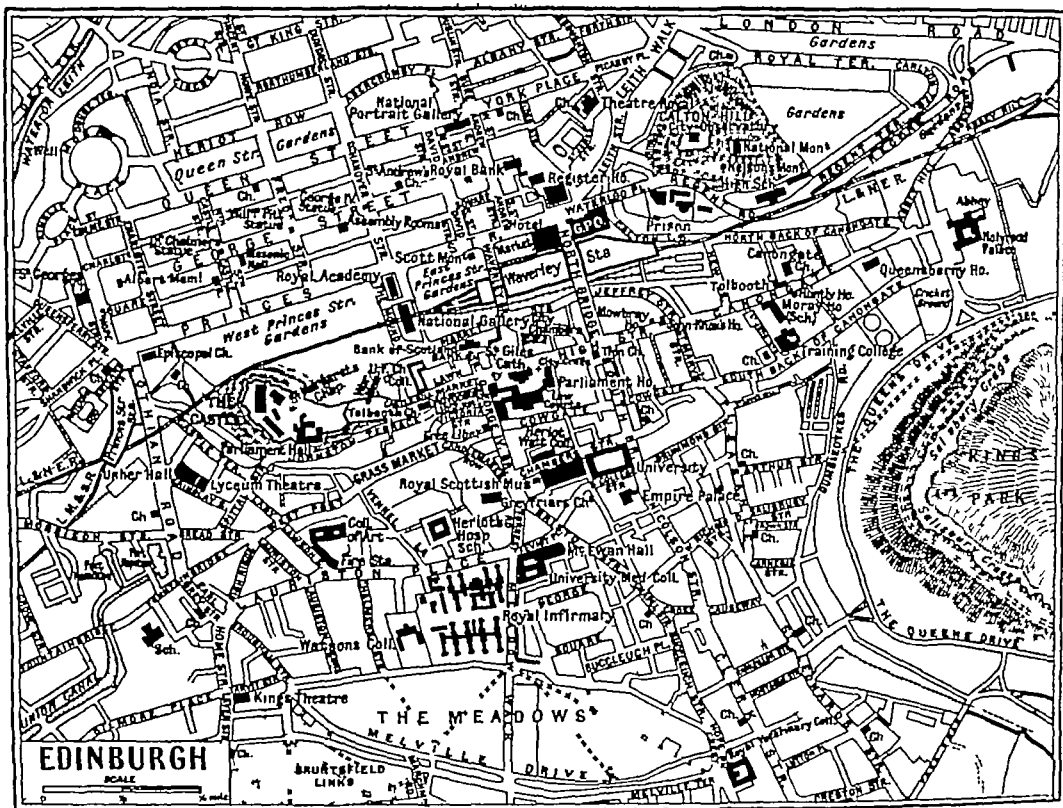
it remains the seat of the Scottish supreme court, of the chief government officers and of a famous university, a military and naval station, the centre of Scottish legal banking and insurance business and the scene of much educational and professional activity. Of late years it has been an occasional royal residence. At the census of 1911 the population was 470,511.

Modern Expansion Seaward

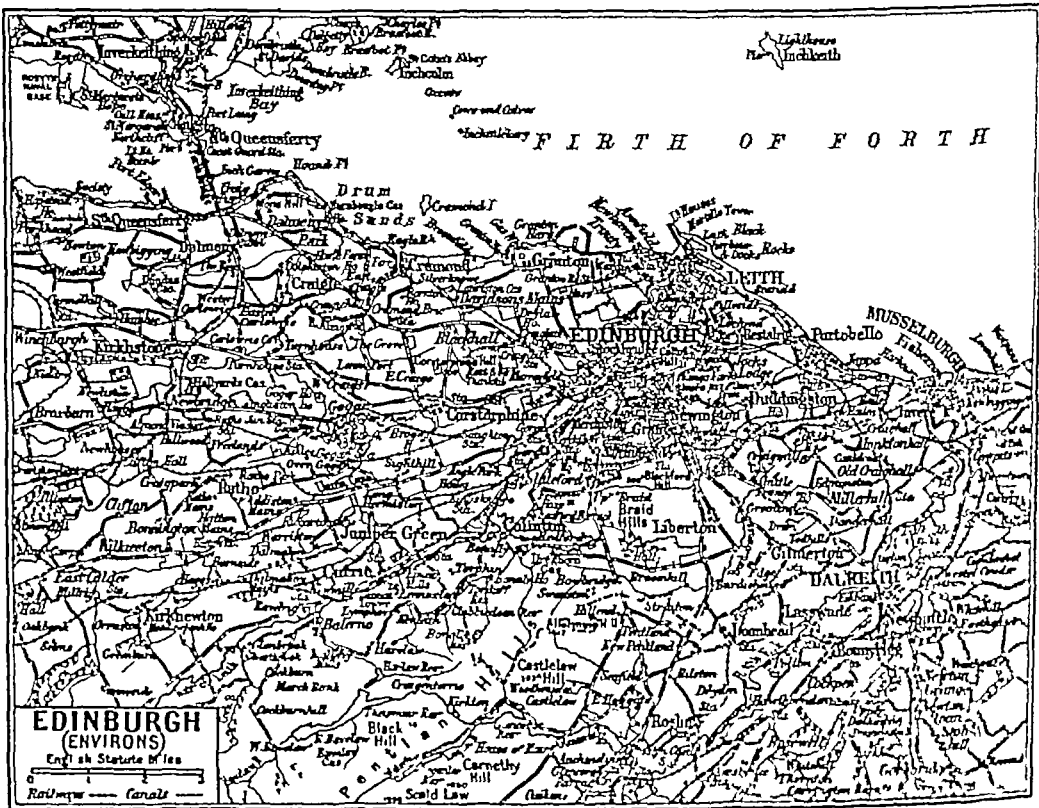
After the Great War Edinburgh opened a new chapter in her history. In 1920 a Municipal Extension Act greatly enlarged the territory of the city which now includes practically the whole sea front of Midlothian, the historic port of Leith has been annexed and a fresh start has been made along many lines of municipal activity.

Nowadays there are really four Edinburghs. There is the Old Town, the historic city of the Jameses and of Mary Stuart, piled along the ridge from the castle to Holyrood; the New Town, covering the northern slopes; the southern suburbs, and the wide extent of Greater Edinburgh stretching from the sea to the north to the Pentland on the south and from Cramond on the west almost to Inveresk on the east.

The Old Town, like other medieval towns, grew up at the foot of the Castle. The Rock of Edinburgh has been a place of strength for more than a thousand years, probably since long before Edwin of Northumbria gave it his name 1300 years ago. Since the eleventh century, it has been included in the Kingdom of Scotland. The oldest building in Edinburgh is in the Castle—the Chapel of St. Margaret, Queen of Scotland, who died there in 1093. Within its walls,



INNER EDINBURGH WITH THE CASTLE AND OLD TOWN



EDINBURGH, ITS ENVIRONS, COMMUNICATIONS AND SEABOARD



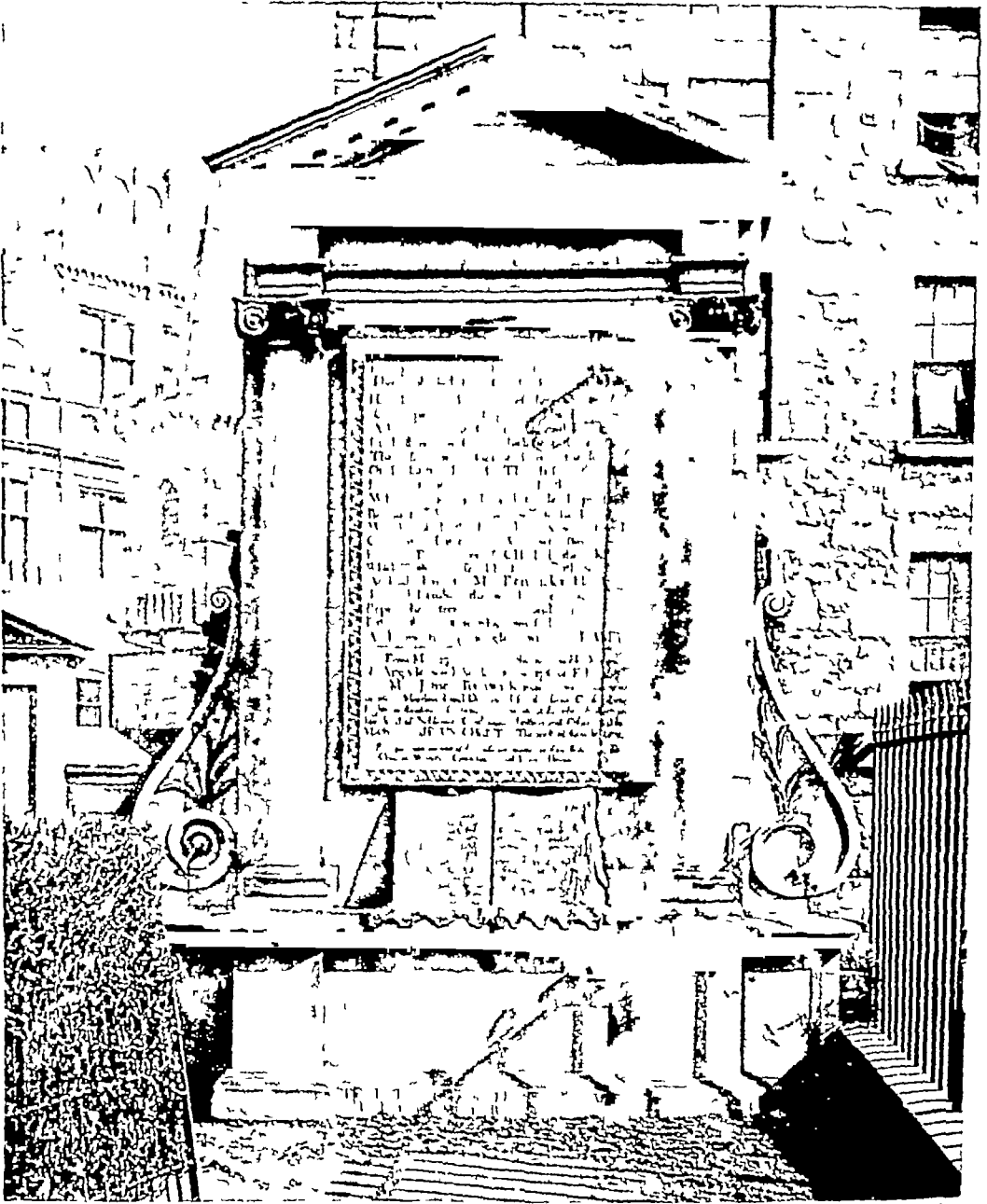
Francis Caled. 1793.

WITHIN THE QUADRANGLE OF OLD UNIVERSITY BUILDINGS

Edinburgh University's chief buildings stand on the site of the old Kirk o' Field and date from 1705. This is the entrance of the old university buildings viewed from within the quadrangle, on the other side of the arches is South Bridge, here the various branches of the Arts have their seat the famous medical school being quartered in a building farther south.

The "Royal Mile," however, is not only a place of memories. It is still a prominent centre of Scottish life. The Castle is still a military station and once a month, when the occupying detachment is relieved there is on the Esplanade a ceremonial guard mounting, with military music and pageantry, a joy to the inhabitants. Within its walls stands the Scottish National War

Memorial. The Parliament House is still the seat of the Courts of Session and of Justiciary. In the Parliament Square are situated the chief government offices, and the adjacent Advocates' Library, which dates from the day of Charles II, is in course of reconstruction as a modern National Library. The City Chambers house every enterprise of civic government. Holyrood is today



Donald McLeish

TRAGIC MONUMENT OF MARTYRED COVENANTERS

Greyfriars Churchyard, an oasis of peace amid the bustle of the city, lies just to the south west of the Grassmarket, and contains the double church of Old and New Greyfriars. It was in this churchyard that the Solemn League and Covenant was signed and here, too, is the Martyrs' Monument commemorating the 18,000 Covenanters executed in Edinburgh between 1661 and 1688.

more of a royal residence than it has been for centuries. It has been greatly improved, within and without, and King George has stayed there time and again, not as a visiting stranger, but as the King of Scots.

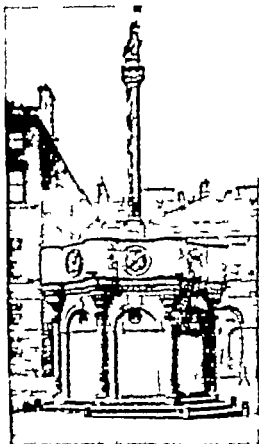
The Canongate, once the court quarter of Edinburgh, has been described as "a slum flanked by breweries." There

is too much truth in the description. The pleasant gardens sloping to the sun, which in seventeenth century pictures one sees behind the Canongate houses, have vanished, washing flutters at windows adorned with coats of arms and frowsy women gossip at doors where once great ladies stepped out of sedan chairs. But there is some hope for the

future. Several historic houses have been rescued and turned to public uses: Moray House, John Knox's House, Moray House (now a training college) and Huntly House, which has been purchased by the city. The whole quarter may one day be reclaimed from squalor and may again become a fitting environment for a king's palace.

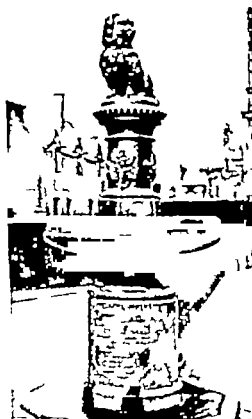
Along the north side of the Old Town runs a deep valley, formerly the "New Loch" which was drained in 1763, and now occupied by Princes Street Gardens and by the big ugly Waverley Station. On the low ridge north of the valley lies the New Town, the business and residential centre of the modern city.

The New Town, originally laid out by the architect James Craig, dates from the latter half of the eighteenth century. The North Bridge, which



SITE OF ROYAL PROCLAMATIONS

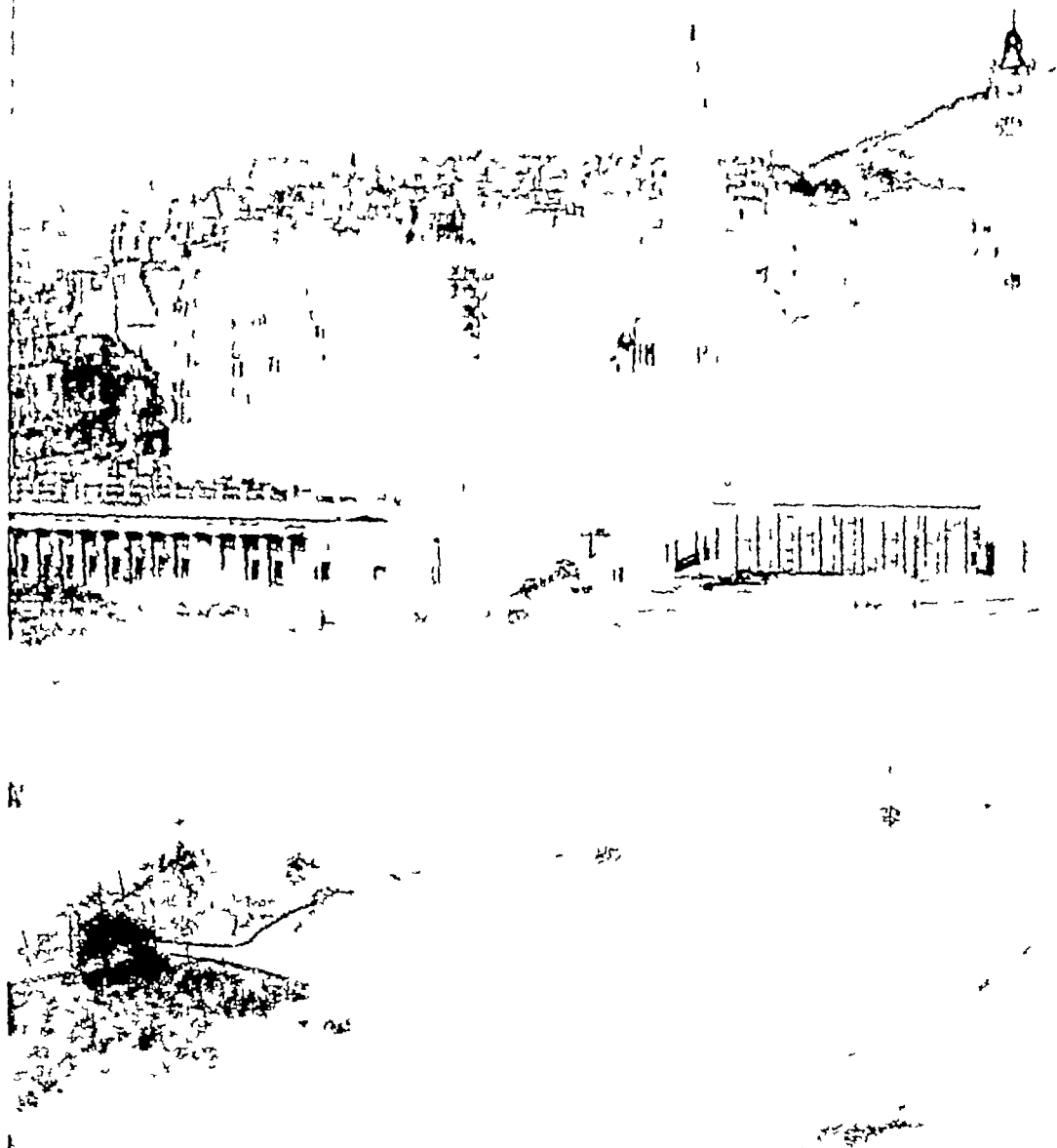
1. Parliament Square is the Mercat Cross, whence Royal proclamations are made. The structure is a restoration, but the "langstone" or shaft is original.



EDINBURGH'S STATUE TO A DOG
"Confessionals" Row leads round Greyfriars Churchyard, and has this monument to Greyfriars Bobby, which waited for fourteen years near its master's grave.

spans the valley, was completed in 1777, although rebuilt in 1897 and by the end of the century Princes Street, George Street, Queen Street, St Andrew Square and Charlotte Square had been built. The essential feature of modern Edinburgh is the famous terrace of Princes Street.

Princes Street runs for about three-quarters of a mile along the line of the old Lang Dykes. On the north side it is now a modern street of clubs and hotels, shops and offices. An early proposal to build a south side was happily nipped in the bud and the street looks out across the valley to a noble prospect of the Castle and the towering roofs and spires of the Old Town, with Arthur's Seat in the distance—perhaps the finest city landscape in all Europe.



SPLENDID PANORAMA OVER THE CENTRE OF THE MODERN ATHENS"—
"Stately Edinburgh, throned in crags"—so wrote Wordsworth, and from the heights that girdle the fair city round, a thousand varying views of unequalled beauty may be had. Here we are standing on the slopes of the Castle and looking eastward towards Calton Hill. Down the centre runs the railway into the vast expanse of Waverly Station, with the National Gallery above the tunnel.



Francis Charles Inglis

—FROM THE SLOPES OF THE CASTLE TO TOWER-CROWNED CALTON HILL

Across the centre the street called The Mound climbs from Princes Street, with its gardens and the Scott Monument, towards the Bank of Scotland on the extreme right. From between the North British Station Hotel (with the clock tower) and the Post Office, North Bridge spans the valley; and Calton Gaele changes to Calton Hill with its observatory and its unfinished replica of the Parthenon.



Donald McLeish

WHERE JOHN KNOX RESIDED AT THE NETHERBOW

John Knox's house is in High Street almost at the Netherbow, site of the old barbican that used to separate Edinburgh proper from the Canongate. There is some doubt whether Knox ever owned the house, but he undoubtedly resided in it for a few years. Hereabouts were many delightful houses until the Town Council Improvement Scheme removed them; this, luckily, was saved.

In a way it is rather like Piccadilly, with the clubs and hotels on one side and the gardens on the other—

Shops, palaces, bustle and breeze
The whirring of wheels and the murmur
of trees

The clubs and hotels are commonplace enough, but Princes Street contains some notable buildings. The beautiful

old Register House, the Scottish Record Office, is a masterpiece of Robert Adam's. The Gothic Scott Monument conspicuously commemorates Edinburgh's most famous son. The classic buildings of the Royal Academy and the National Gallery, planted in the centre of the valley, combine with the Doric columns of the National Monument on the



HOME OF VANISHED COURTLY SPLENDOUR

The Canongate derives its name from the time when it was practically a separate township founded by the Canons Regular of S. A. gusline in the reign of David I. In it, in later age, courtiers and nobles built their houses; to-day it is the haunt of poverty. This dilapidated but still beautiful old house, built in 1570, was once the residence of the Marquess of Huntley.

David Melrose

Calton Hill to suggest the note of the Modern Athens."

Princes Street is the shopping centre of Edinburgh and the popular promenade. Scott's child friend Marjorie Fleming—Pet Marjorie—described the crowd of the early nineteenth century with her usual felicity. Queen Street is a very gay one and so is

Princes Street for all the lads and lasses besides bucks and beggars, parade there." The modern Edinburgh buck has not varied greatly from type since Meg Dods described his predecessors as "a whien writers, clerks and phisic students."

There is a street corner in George Street at its intersection with Castle

Street, which may be taken as a focus of the characteristic interests of modern Edinburgh. You are in the very middle of the business world, on the doorstep of the office of the London and Liverpool and Globe Insurance Company, and close to the principal branch of the Bank of Scotland. Just round the corner is 39 Castle Street, the house where Walter Scott lived for twenty-six years. Across the street is the statue of Dr Chalmers. Looking east you can see the tall monument of Henry Dundas, "the Pharos of Scotland," the friend and colleague of Mr Pitt, and the statues of Pitt himself and of George IV, the portico of the Assembly Rooms where Edinburgh Society has danced for 140 years, and S Andrew's Church, which was the scene of the Disruption of the Church of Scotland in 1843. To the west lies Charlotte Square, with its fine Adam façades, and the dome of S George's Church against the sky. To the south the Castle looks down from

its rock, out of the Middle Ages, and to the north you can see the Fife hills and the Firth of Forth, and "ships tacking for the Baltic."

Incidentally, there is a great deal of good Adam work in the older part of the New Town—house fronts with delicately designed pilasters and cornices, doorways, ceilings and mantelpieces. In the days of the Gothic revival Ruskin came down to Edinburgh and lectured the citizens on the iniquity of erecting classic buildings. To day Victorian Gothic has gone out of fashion, like the crinoline, and the Georgians have come to their own again.

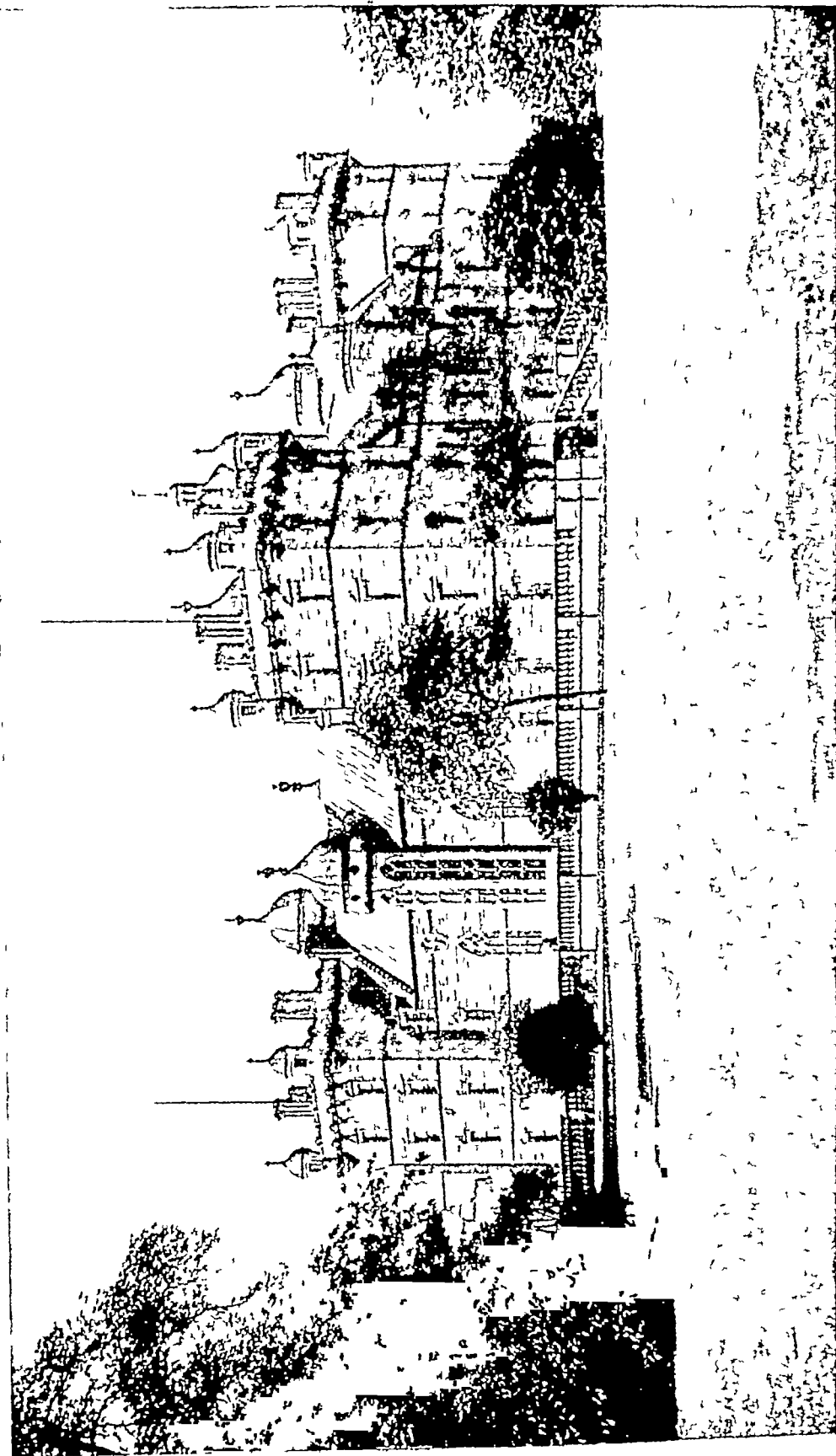
To the north and west lie the old residential quarters, Moray Place, Ainslie Place, Heriot Row, Royal Circus—wide streets and squares of solid freestone houses with spacious, hospitable dining-rooms and goodly cellars, houses built for a pleasant and prosperous society. War and a changing world have affected Edinburgh like other places and not a



VESTIGES OF THE CROWDED TOWN OF OTHER DAYS

In S. Mary's Street once called S. Mary's Wynd, leading southwards from the Netherbow, is the White Horse Close. These "closes" are a feature of old Edinburgh, once the sites of the town houses of the wealthy, they are now for the most part squalid and in disrepair. In White Horse Close stood the inn of the same name where Johnson lodged in 1773.





Donald McLeish

HERIOT'S HOSPITAL SET AMID TREES AND LAWNS IN THE HEART OF THE OLD TOWN

Heriot's Hospital is one of the handsomest memorials of Jacobean times in Edinburgh. It stands in its own grounds between the Grassmarket and Lauriston Place, and is considered an extremely good day school, accommodating about 180 boys. It has changed its character, however, since the days of its foundation, in 1628, then it was a home for the maintenance of fatherless and destitute children. It was built and endowed by the goldsmith and banker to James VI (James I of England) George Heriot—"Jingling George" as he was called from his enormous accumulation of cash.



James VI, "for the education, nursing and upbringing of youth, being pur orphans and fatherless children of decayet burgesses and freemen of the burgh, destitute and left without means" His charity has prospered exceedingly, and has thrown out many educational branches Close to the grounds of Heriot's Hospital lie the Greyfriars Church and Churchyard, where in 1638 the National Covenant was signed, and where many famous Scots lie buried Farther west is the modern College of Art George Square, where Scott spent his boyhood, is largely occupied by halls and class-rooms connected with the university

Edinburgh Trebles Its Extent

Farther to the south is a large suburb—a district of villas and tenements, not differing greatly from suburban districts elsewhere, except in its stone-built houses and its views of Arthur's Seat, Blackford Hill, Braid Hills and the Pentlands

By the Act of 1920 Edinburgh trebled its extent It now includes the port of Leith—annexed somewhat against her will—the chief Scottish port of entry from Germany and the Baltic, Portobello, Newhaven and the Lothian shore as far as Cramond, the old Roman station of Alaterna On the landward side it includes Corstorphine, Colinton and Swanston, made famous by Robert Louis Stevenson, the northern end of the Pentlands, Liberton and Gilmerton—a stretch of country rich in natural beauty and in story

Ideals and Realization

In the words of a recent official writer, "a long step has been taken towards the realization of the ideal, contemplated in the closing passages of the report, dated February, 1919, by the Town Clerk, Mr Grierson—that of 'one Great Municipality, representing the whole Edinburgh area, drawing its inspiration and strength from a population of half a million—half a million people in virtual possession of an

unrivalled seaboard awaiting exploitation, with the nucleus of a splendid suite of docks through which to carry an ever-increasing trade with the Continent and with an extensive coal-field at their very door"

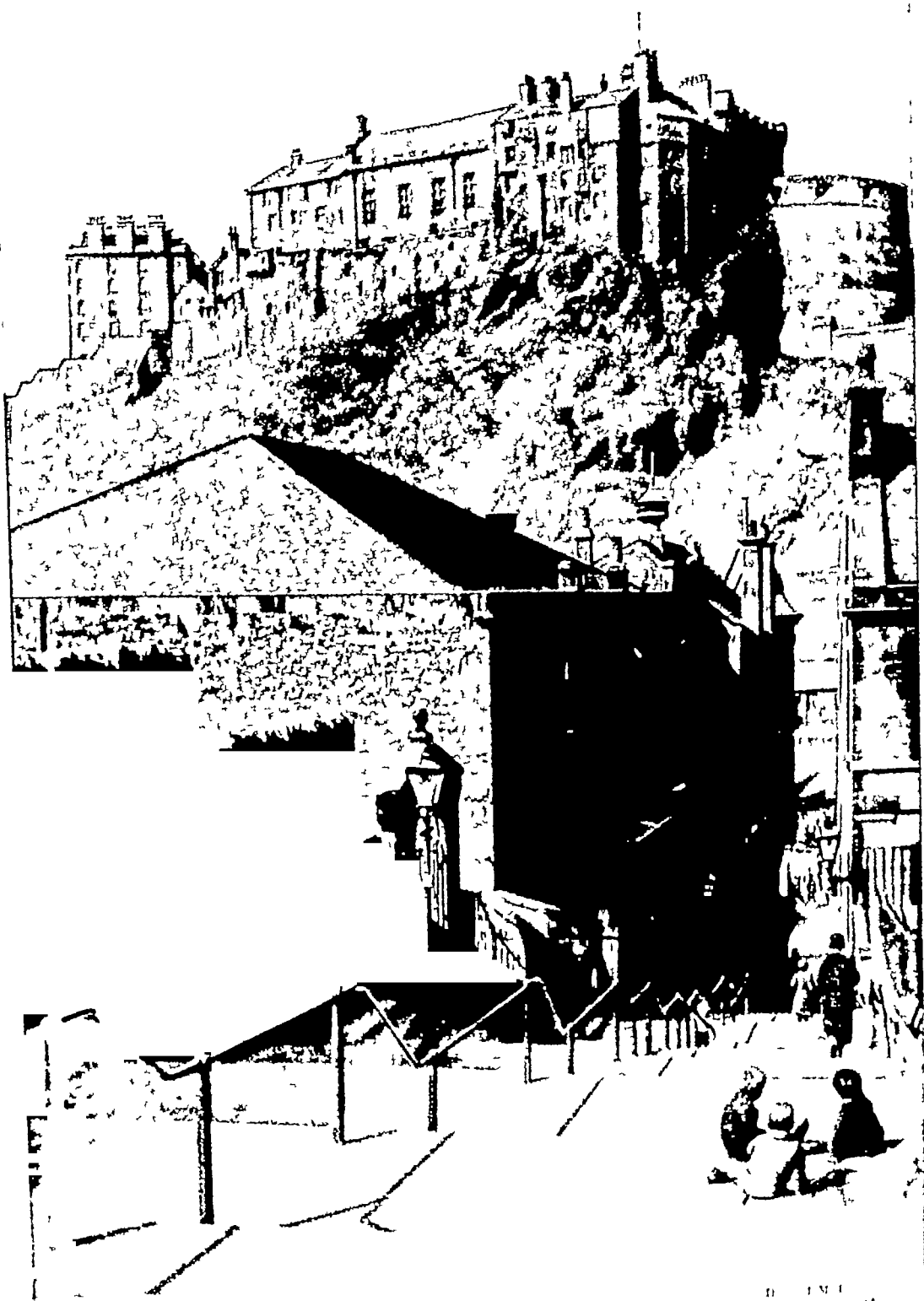
A notable feature of Greater Edinburgh is the large new group of cavalry and infantry barracks at Redford, near Colinton, which make the town an important military station and keep it in touch with the fighting services The Edinburgh burghers have always been a warlike race All the magistrates and able-bodied citizens followed James IV to Flodden They turned out under the "Blue Blanket," the banner of the Trades, to resist Hertford's invasion in 1544, and in 1666, when the Westland Whigs threatened the city, they found "every advocate in his bandileers" In the days of the old French War, and again in Victorian times, Edinburgh was a great centre of Volunteering The Queen's Edinburgh Rifle Volunteer Brigade stood in the front rank of the Volunteer movement

A Repetition in History

When the Great War came, Edinburgh did her duty The city and county furnished some twenty battalions of infantry and nine batteries of artillery, about 25,000 men in all, to the armies of the King Public buildings were turned into hospitals, and local industries into war factories The Battle Cruiser Squadron was based on Rosyth, and the Thirteenth Destroyer Flotilla, the spear-head of the Fleet, lay at Port Edgar It was from under the Forth Bridge that Beatty sailed for the Dogger Bank and for Jutland, and it was off Inchkeith that the German fleet first anchored after the surrender On one memorable night, April 2, 1916, the city, still destitute of aircraft defence, was heavily bombarded by Zeppelins, much damage was done, and lives were lost If it was meant to create a panic the raid was a failure As one good citizen said "Panic? It wasna a panic, it was a tonic"



EDINBURGH Many a prisoner mean and noble has climbed the
sleep staircase of the Tolbooth in the Canongate to meet his doom

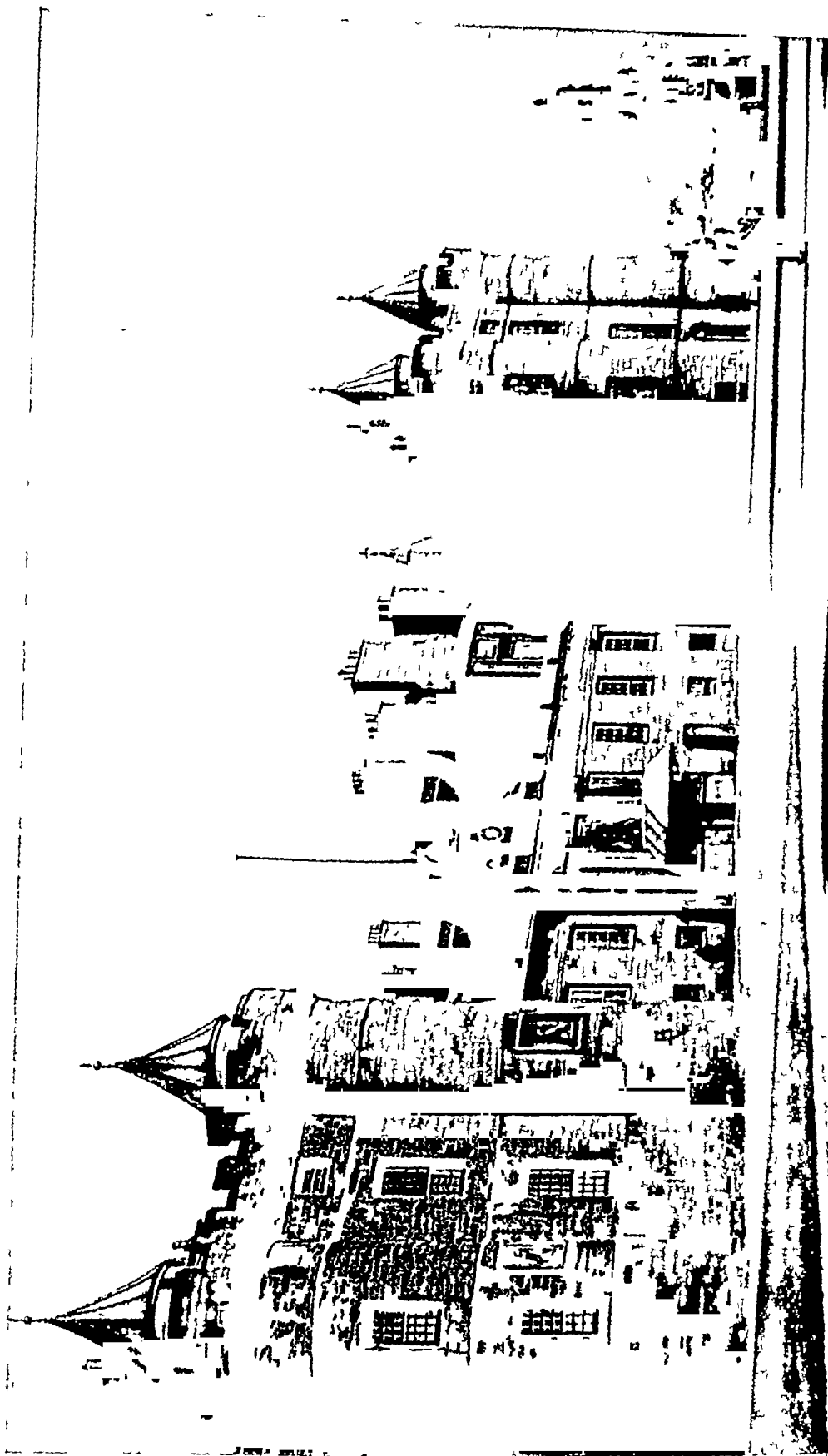


EDINBURGH. Viewed from the Old Town, Edinburgh Castle seems as invulnerable by time as the rock on which it is built



Donald Low

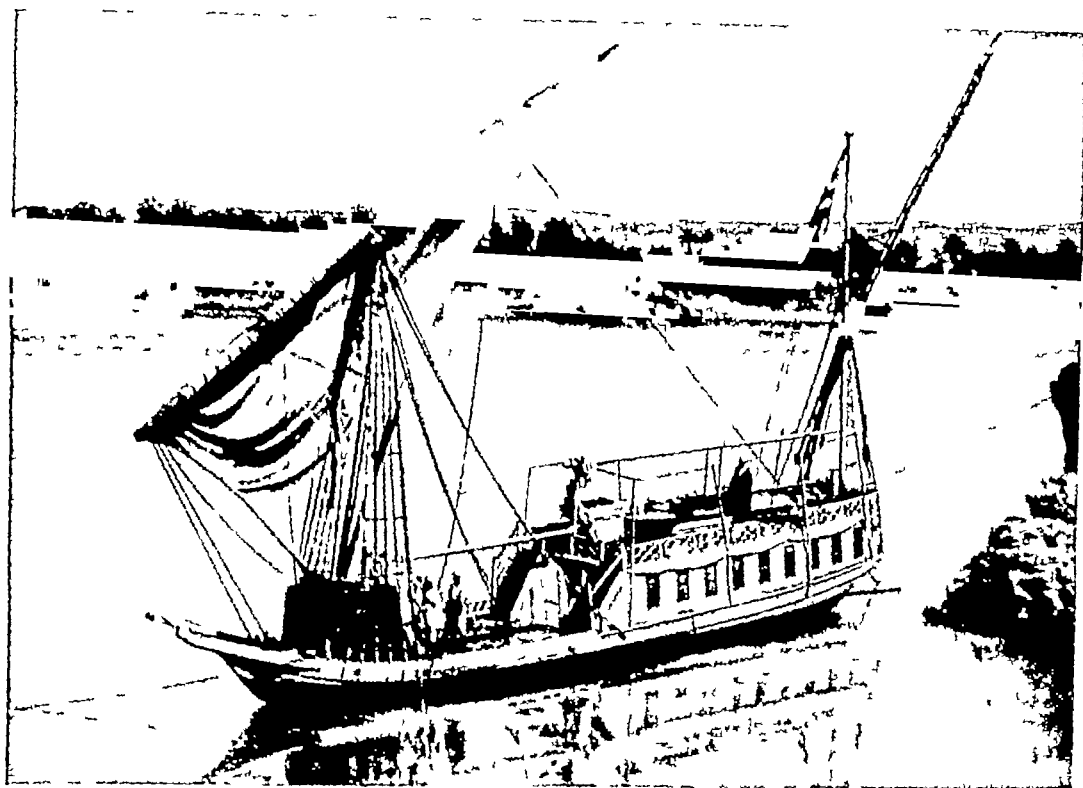
EDINBURGH Set between the Castle and the Scott Monument the Art Gallery seems to figure art between history and romance



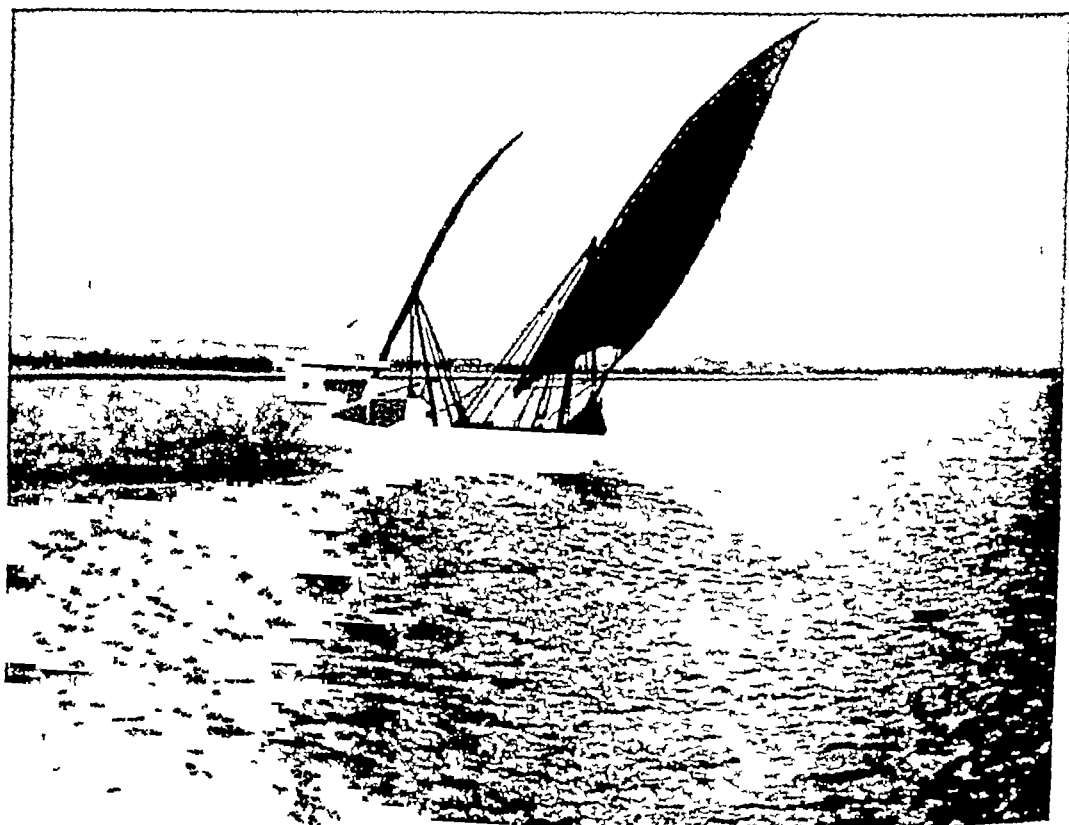
EDINBURGH In the old tower on the left of the main entrance to Holyrood are Queen Mary's rooms. The picture gallery is on this side of the quadrangle. the state apartments.



EGYPT Beneath the rocky ramparts of the Libyan desert at Dakhla, the little village of Dakhla is nestled at sunset. Queen Hatshepsut three thousand years ago built herself a tomb in the valley for



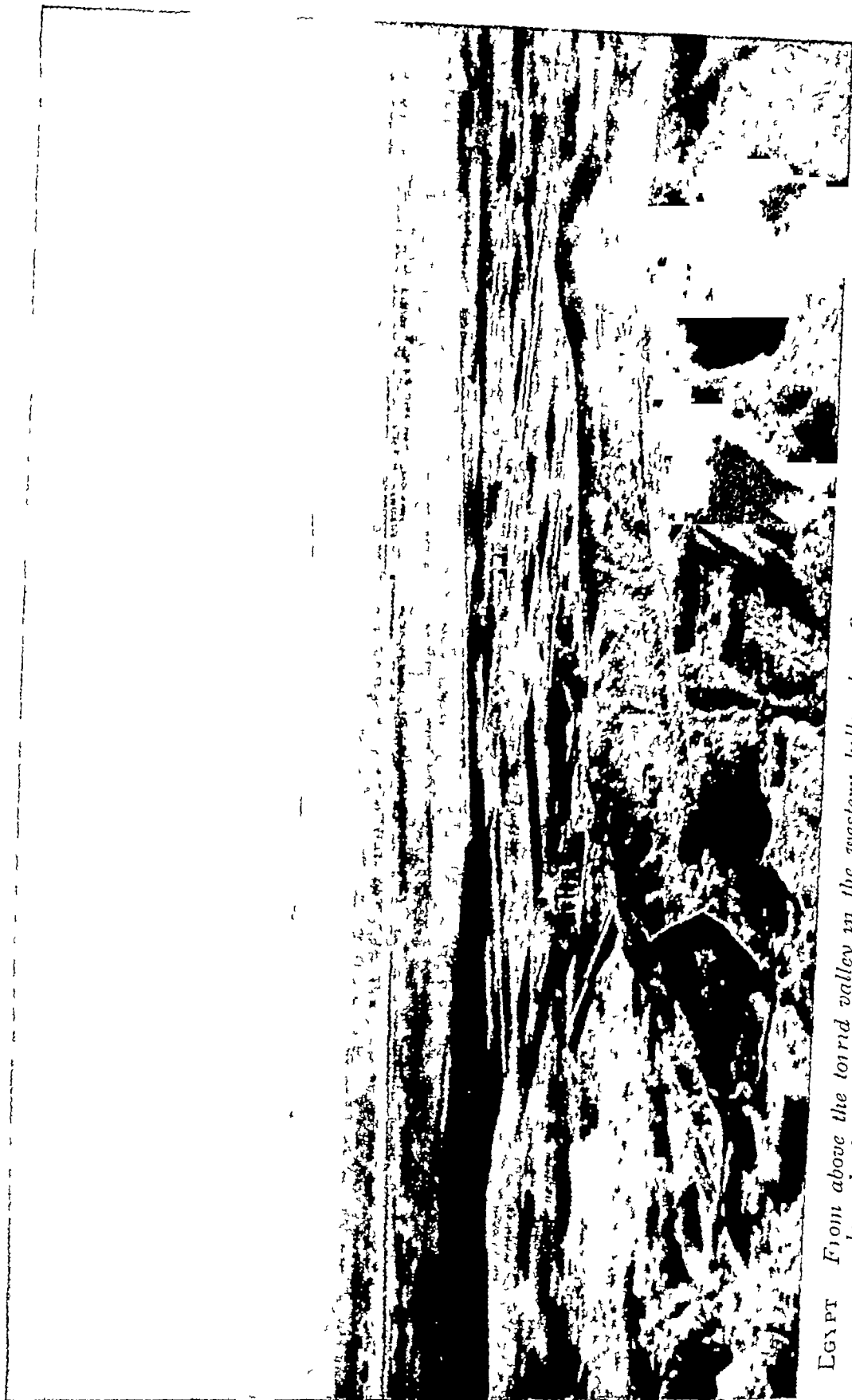
EGYPT *Developed from the painted galleys used by the Pharaohs, the dahabiyehs plying on the Nile to-day are roomy houseboats*



EGYPT *Here in the moonlight on the Upper Nile the swift felucca, always a graceful craft, skims the water like a thing of living beauty*



16517. This alabaster statue of a pharaoh is located on the site of Memphis in Egypt. It dates from the time of Ramses II.



EGYPT From above the torrid valley in the western hills where Tutankhamen and the Pharaohs of his line buried, the view towards Thebes and the Nile embraces the

Fertile Daughter of the Nile

by Percy I. Martin, F.R.S.

Author of "Egypt—Old and New" "The Sudan in Evolution" etc

FROM any a point—the sea, far land or air—the shapeless form of Egypt offers little relief. Low venturesome hills project so dubiously above the plain that nothing noticeable strikes the eye. The mountains rarely take the form of peaks. Granite or sandstone hills, limestone plateaux, the plains of horn Ombo and Bahari—all alike to the casual eye, although the geologist and the surveyor will, no doubt, discern considerable differences. In the wonderful Valley of the Nile the sea itself once penetrated at least as far as Fath. Evidence is found in the still thick deposits of sand and gravel left behind by the receding waters.

The coast displays many interesting geological features, the alluvial soil little or none. Whence, if not from the quarries of the Nile, could have come those massive blocks of rock forming the structure of Alexandria's modern docks? Did not every block of Cheops' massive pyramid, covering 13 acres of ground and containing 88,500,000 cubic feet of stone, come from Egyptian quarries? And yet, with all this primitive rock formation, there are found singularly few precious minerals.

Parched Wastes of a Vast Tableland

In an area covering thousands of square miles (of which the narrow Nile Valley and Delta alone are thickly inhabited) a variety of soils must exist—naturally gravel, clay, and quantities of sand. In the fruitful valley, the subsoils are of sandstone, limestone and alluvium. Here moves the life of Egypt. The many oases have their own small communities. They lie far distant from each other and are reached by caravans, except in the case of the

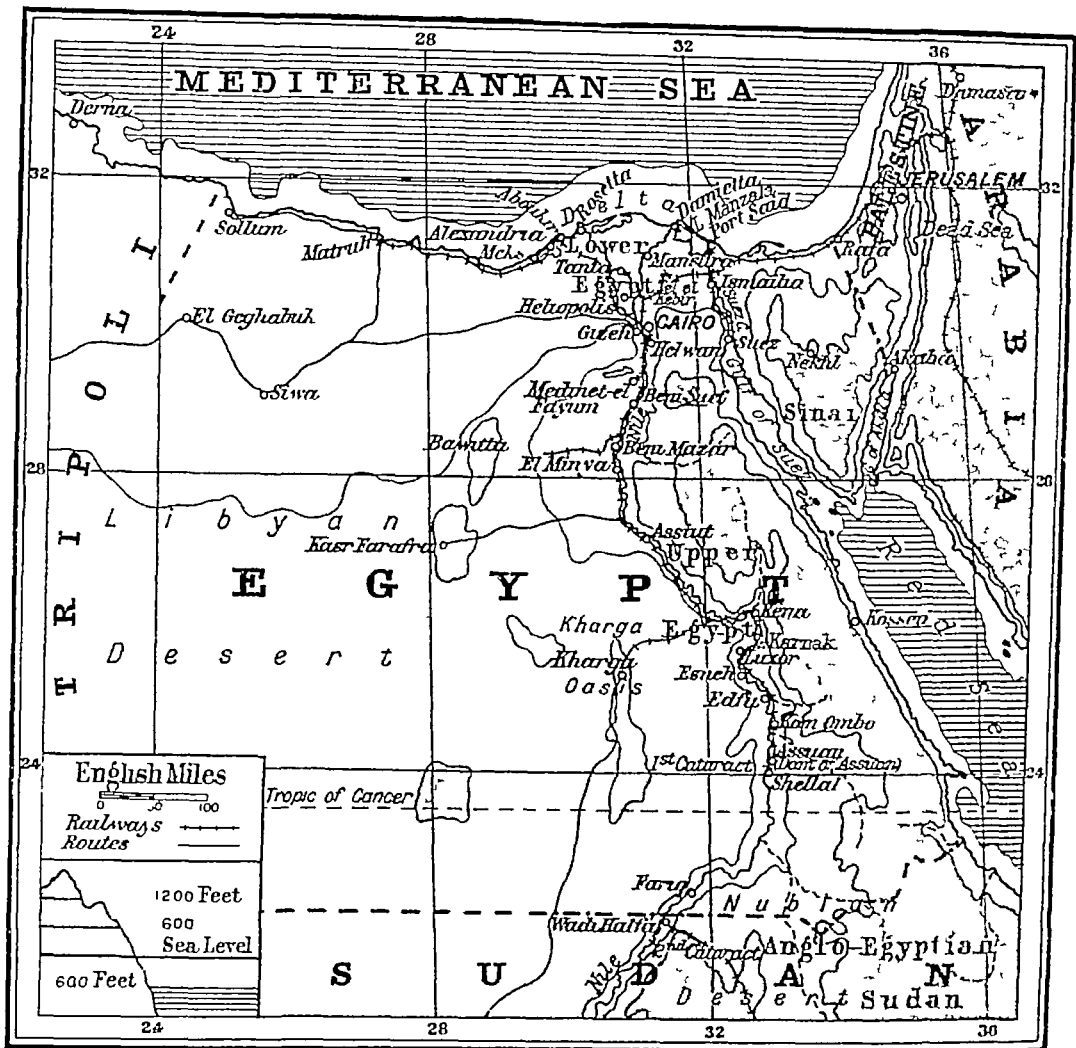
desert railways, some of which are being threatened with engulfment by the water's sands upon which they are so substantially laid.

The vast unbroken tableland on either side of the Nile Valley, treeless, waterless and parched to a fan-dry powder, offers little inducement to tarry on one's way, one merely marvels that in such a dreary desolate region human beings can be found voluntarily to dwell. Inhabitant however there are—not many, perhaps a few thousand Arabs of Berber origin. Even they however appear destined gradually to die out.

Frontiers Challenged and Unchallenged

But habitable Egypt is physically a small country, notwithstanding its predominant place in history. Well-defined natural boundaries upon three sides have undergone little change during the centuries. To the north stretches the Mediterranean to the east the Arabian desert and the Red Sea, and to the west another desert—the Libyan. The south has no natural boundary. An imaginary frontier during 6,000 years has changed politically, again and again according to the strength or weakness of the ruling power at the time.

To-day there is a length of 680 miles between the Mediterranean southwards to the Nile and Wadi Halfa, where the Anglo-Egyptian Sudan begins. If desert valleys and the peninsula of Sinai be included, Egypt occupies an area of less than 400,000 square miles. Under the Turks the Beduin had guarded the frontiers and controlled public security in the interior. The British Occupation placed frontier



EGYPT AND THE NILE A CONTRAST OF DESERT AND TOWN

protection upon a better footing But the exact boundary between Egypt and Italian Tripoli has yet to be fixed, while that between the Anglo-Egyptian and the French Sudan remains unsettled

Upon this southern boundary, continually shifting, now to the north, now to the south, may be traced something of Egypt's own fluctuating fortunes Wide tracts of territory have been won by the sword only to be lost by the sword In 1883 the state had a territory nominally at least as large as European Russia (2,000,000 square miles) In early times, too, wavering fortunes controlled the extent of its area during successive periods, as it did from the rule of its native kings under that of Persians, Macedonians, Ptolemies, Romans, Byzantines and

Mahomedans When Mehemet Ali, the founder of the modern vassal kingdom of Egypt, died in 1849, he bequeathed to Abbas Pasha, his incompetent successor and grandson, a power extending far to the south of the first cataract and including not only the Nubian valley of the Nile with the Nubian desert regions but also what to-day forms the Anglo-Egyptian Sudan, an area of some 1,000,000 square miles

The institutions of a country depend in a great measure upon the nature of its soil, situation and climate Especially is this true of Egypt Its impressionable people are greatly affected by conditions of temperature, moisture and sunlight Besides almost continuous sunshine there prevails what may be termed a "continental climate"—that

is to say one that is occasionally severe. It can be extremely cold usually, however, it is intensely hot. Rain, although rare especially in Upper Egypt, can prove torrential, sometimes coming down while the uttermost deserts of Arabia and Libya produce high winds by day and calm cold nights. The wide range of temperature has caused the natural rock to pit up, desert formations driven the sand in heaps against them, the continual friction explaining the unusually polished surface of the crystalline schists.

When Lord Byron wrote of

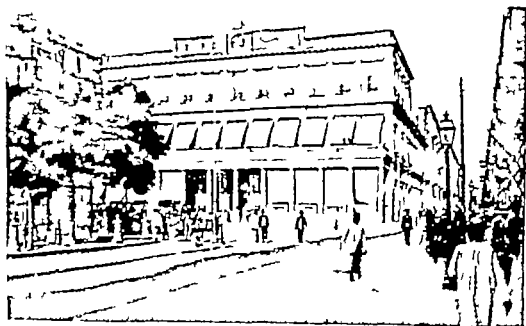
that wild exhilaration in the air which
makes the passers in the city street
Greet and salute each other as they meet

he must have thought of the winter air in Egypt. This wonderful atmosphere further enriches life, what has been said already about the effect of climate upon human temperament. It accounts also for the extraordinary popularity of the full sanatoria in Egypt. The comfort as well as the health of visitors has been tested with a diligence and

perfection of detail difficult to excel in any part of the world. Whether it be Heliopolis with its curative sulphur bath and thermal establishment, or Heliopolis with its uniquely beautiful situation, its pure and bracing air and superb views across the Arabian desert, or again Luxor or Assuan, the sun invigorating almost intoxicating atmosphere is to be enjoyed in all places, especially just before sunrise.

In Cairo and throughout the Delta the mean temperature is 53° F. in January, rising to 84° in July. During the blowing of the awful Khamsin desert wind the temperature rises as high as 115°. In Upper Egypt where the desert climate rules the mean winter temperature is 64° (minimum 37°) while in summer the thermometer climbs to 120° in the heat. Throughout the country the coldest period is just before sunrise, the maximum point being reached between 11 and 3 p.m.

It is, however, the valley land of Egypt that calls so irresistibly to the traveller. In its own capricious way it is perhaps one of the most alluring of



PLACE MEHEMET ALI IN RENASCENT ALEXANDRIA

After long years of decay Alexandria is at last recovering some of the prosperity which it enjoyed for centuries following its foundation by Alexander the Great in 331 B.C. The first thorough recovery was effected by Mehemet Ali, after whom this square, the great centre of European life named after him, was built. The white building shown here, occupying the east side of the square, is the Exchange.



R. H. Goodall

VIEW OF THE NILE VALLEY FROM THE BARREN GORGE WHERE THE PHAROHS WERE ENTOMBED

This photograph is of especial interest as it shows approximately the same view as that given in colour in page 1748, there, however, the Nile is at low level, whereas here it is in flood. We are looking from above the forbidding entrance to the Valley of the Tombs of the Kings at Luxor, the broad expanse of water is not the Nile itself which flows in the far distance, but part of its overflow. The flooded Colossi may be seen on the left, like two swans on the face of the waters. The Nile commences to rise at Assuan in June and reaches a maximum in September the lowest period being from January onwards.



FIGURES OF A PHARAOH DEAD THREE THOUSAND YEARS

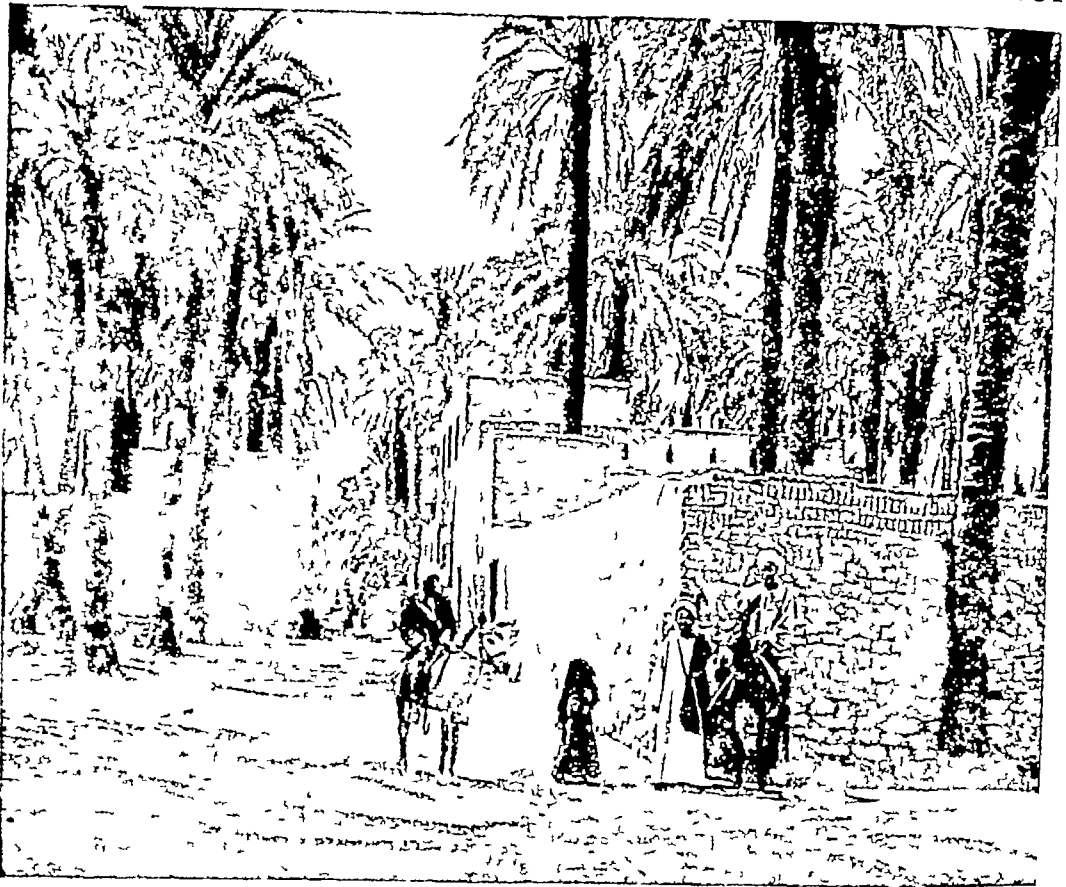
Illustrating the spirit of the Egypt that was for thousands who visit the country to-day, the so-called Colossi of Memnon stand on the west bank of the Nile opposite the ancient Thebes, about half a mile east of Medinet Habu. They were here to guard the entrance of a shabbed temple of Amenhotep III whom they represent. The right hand one was shattered by an earthquake.

regions. Of trees—which Pope declared to be “nobler subjects than princes in their coronation robes”—there are many beautiful varieties. In every town and village one will see clusters of the *Acacia nilotica*, the aromatic thorn of antiquity; the palm always beautiful and generally useful; the tamarisk; the sycamore once deemed sacred as Christ’s thorn tree; the mulberry and the carob or bread tree.

While the Khedives Abbas I and Said were avowed enemies of all trees, destroying them ruthlessly everywhere, even in their own domains, and thus exposing their palaces to the full glare of the African sun, their successor Ismail prudently engaging the services of the great French landscape-gardener Barillet planted within a few years many thousands of fine trees. Tired travellers passing wearily along a once dry and

dusty highway have had good reason to feel thankful for this enterprise.

In a land as arid as Egypt the traveller would not perhaps expect to find many different varieties of flowers—those “prophets of fragrance beauty joy and song.” But he will be agreeably disappointed especially as regards the number and beauty of the roses. Who has not heard of the *Rosa damascena* from which the exquisite attar is made? The flower flourishes side by side with the superb oleander geraniums and innumerable sweet-smelling herbs reaching an astonishing height. The *Poinsettia pulcherrima* with its leaves of brilliant vermilion surrounding but an insignificant little bloom forms the glory of many an Alexandrian garden in winter. The Nile soil is, indeed, so rich and so prolific that anyone wishing to cultivate flowers can do so as easily as



AMID PALMS THAT ROOT IN THE SOIL OF ANCIENT THEBES

Karnak to-day is but one of the innumerable villages that the life giving Nile calls into being along its banks but together with the neighbouring town of Luxor it marks the site of "hundred gated Thebes" It is built among the ruins of the great temple of Ammon but with its palms and its stone and mud brick walls is a typical community of the Egyptian fellahin

did the Egyptian priestesses who reared and adored the sacred iris

But Egypt is not merely a land of pleasure While its manufactures may one day serve to increase its wealth and prosperity, its real economic strength reposes, as in ages past, in the hands of the cultivators of the soil But Egyptian soil, unlike that genial earth which "laughs with a harvest when tickled with a hoe," is hard to work Yet from this difficult, inhospitable-looking baked earth formed by a deposition of Nile mud, once it is softened and soothed by plentiful irrigation-water, are raised those wonderful crops which constitute the foundation of Egyptian prosperity The cultivable area is put at 8,000,000 feddâns—say 12,980 square miles Much, of course, may be done with such an area, but, as a fact, little more

than three parts is actually under cultivation

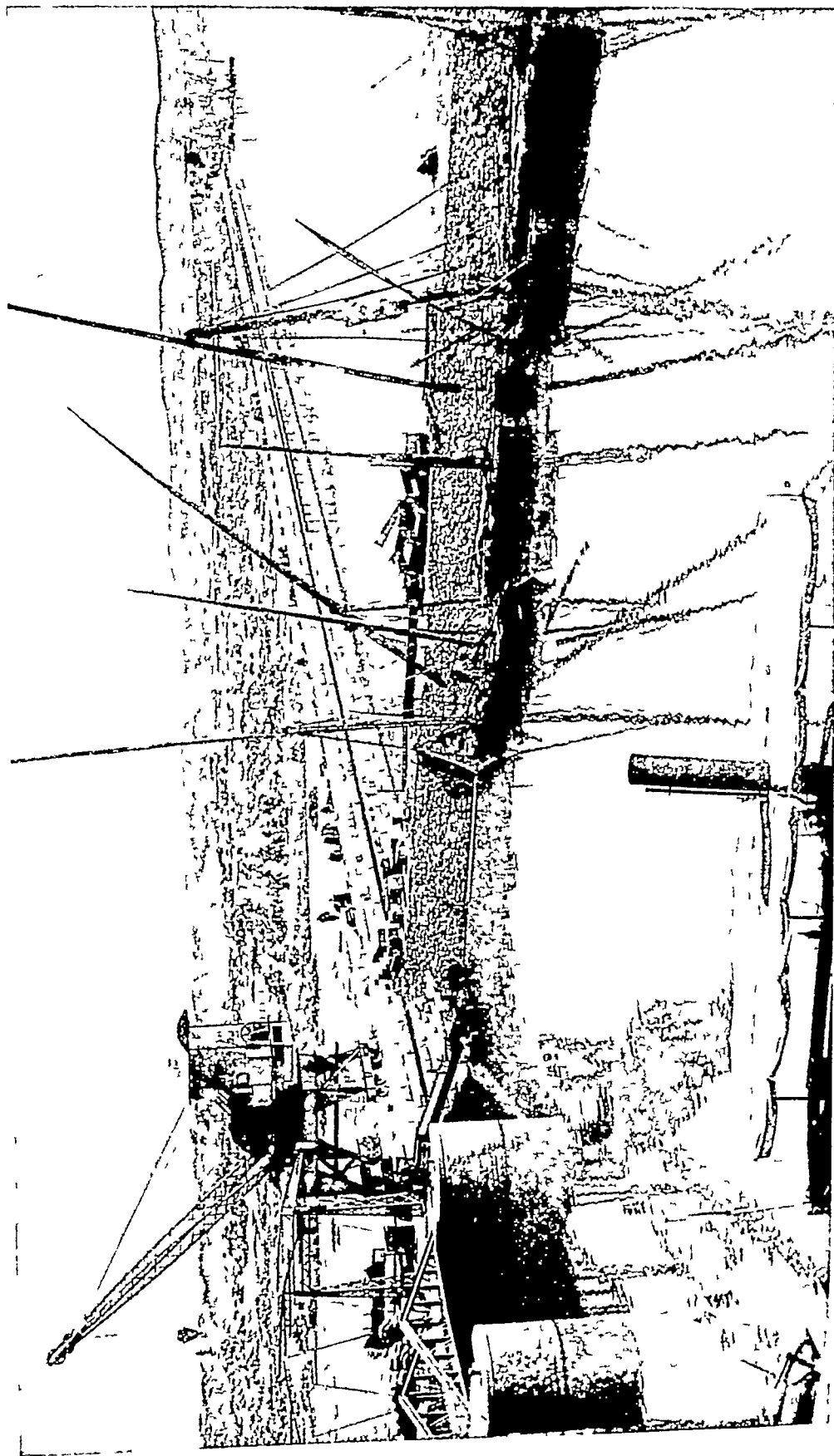
No peasantry in the world are more severely tried in their struggle with nature than the Egyptians, nor any tillers of the soil called upon to display greater industry and powers of endurance But they now no longer depend upon the beneficent, if always uncertain, Nile inundations A perfected system of artificial irrigation throughout the seasons floods and irrigates land whereon nothing could formerly be grown Irrigation is of two kinds, depending upon the height of the land above the surface of the Nile First there are the "rai" or fields retaining their moisture after the river's overflow has retired sufficiently to admit of the ripening of the crop, and secondly, the "sharak" or areas of artificial irrigation by means of



Donald McIlroy

IN THE GLARE OF THE MARKET PLACE AT ASSIUT

Assiut was an important town in the most ancient times, and is still the largest city in Upper Egypt and the capital of the province. Although the diversion to other routes of the caravans from the African hinterland has impaired its commercial prosperity. It is famous for its fine pottery and its gold and silver embroidered shaw's. Down stream is the Assiut Barrage.



B N A

LOOKING FROM WEST TO EAST ACROSS THE HUGE BARRAGE THAT DAMS THE NILE AT ASSUAN

The fact that the reservoir is full of water shows that this photograph of the Assuan Barrage was taken between February and April. At the end of that period the water is tapped for irrigation purposes until July, when river level is reached. All the sluices are then opened to allow the Nile flood to pour through, in December they are gradually closed again. The view here is from within the lock at the end of the navigation canal on the west side. Commenced in 1898 after designs by Sir William Willcocks the vast structure 2,150 yards across, and 98 feet thick at the bottom, was completed in 1902 at a cost of over £3,000,000.

primitive but still effective apparatus known as the *sakieh*, "the *shaduf*" and the *tabut* "or by means of the more practical steam-driven pump

Measures must continually be taken against the numerous insect pests especially the pink boll worm. In this direction British agricultural inspectors have rendered invaluable services in proving operations at the ginneries fumigating gardens and trees and recommending numerous remedial measures. A detailed study of the rusts and smuts in wheat barley and oats the diseases of cotton such as *were-skin* and experiments with different fungicides, so far as they affect parasites, have helped greatly towards saving and increasing Egypt's various crops.

Quick Transport for Egypt's Produce

Of agricultural seasons there are three the winter crop is gathered about the middle of February and the summer crop in November while the autumn, a short season but none the less important yields its cereals about January. Indeed there are but few months of the year when the generous soil of this favoured land fails to produce a crop of some kind.

Great advancement has been made in the marketing of Egypt's sugar cotton and other crops. In place of the ponderous ox-drawn wagon, creaking and groaning painfully and wearily over execrable roads, or the native *felucca* crawling sluggishly along the silent waterway there are now motor trucks, speedy steamers and many miles of light railway to deposit at the depots in a few hours what formerly took days and even weeks to transport.

The trade of Egypt has attained a position of great but varying importance. As regards both imports and exports the United Kingdom stands far ahead. During the British Occupation governmental control had been felt—not always perhaps beneficially. There were controls of sugar cotton prices, flour importation and tobacco cultivation. The sugar monopoly ended in 1923.

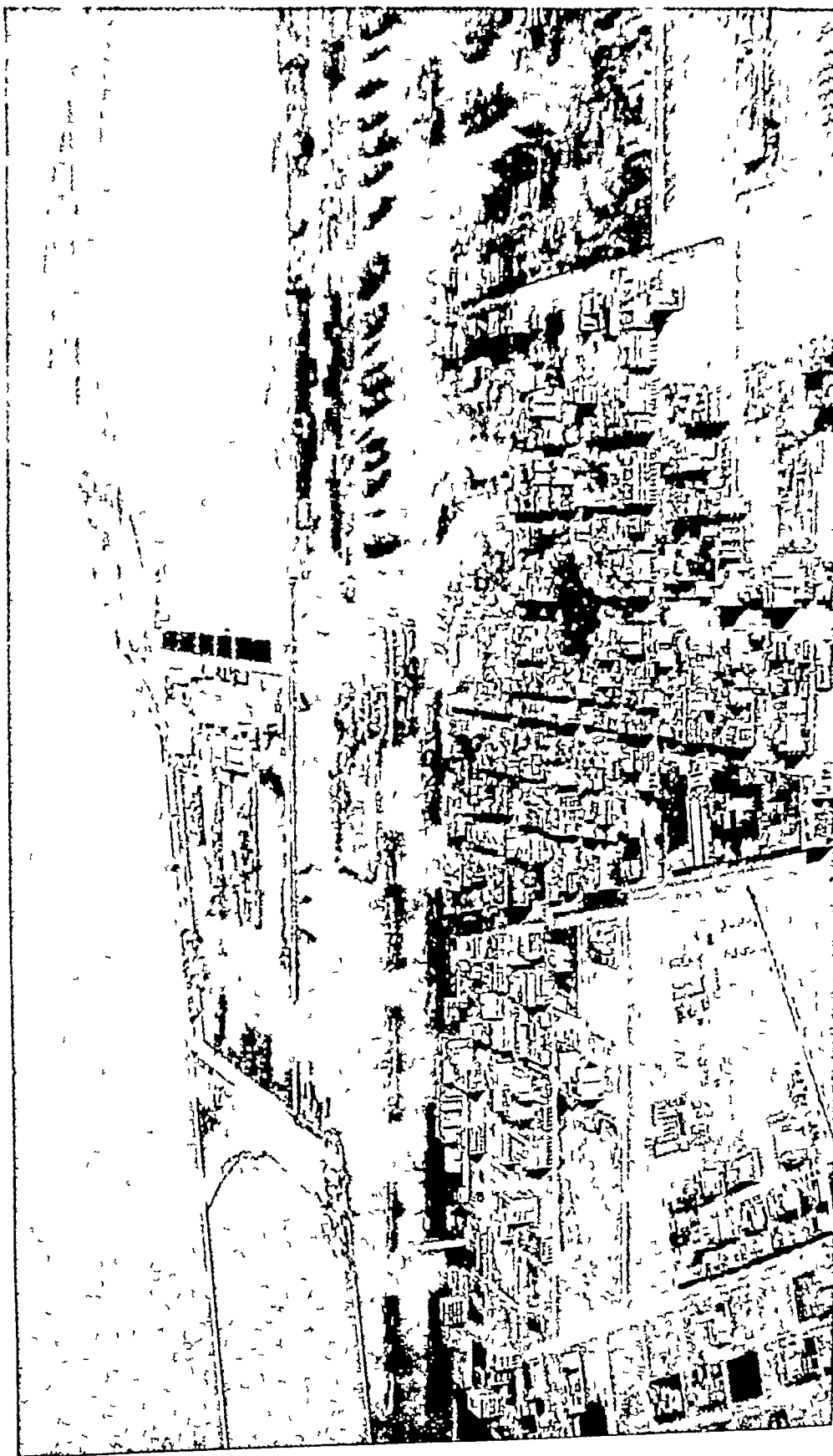
In no country is trade more affected by politics. An uncertain outlook in the situation is at once followed by economic depression and a trade crisis in Egypt can become a real menace. The banks which are still largely in the hands of reputable Europeans, help to keep the balance fairly even and are generally found ready to assist any legitimate enterprise or industry by liberal credits at moderate charges. The cash on delivery basis upon which most British export houses conduct their business with Egypt constitutes their greatest safeguard.

Wide Choice of Sea Routes

Egypt is quite easy of access. If all roads lead to Rome most steamer routes conduct to Port Said. Should one want to reach Egypt by a long route there are the P and O weekly service, taking twelve days from London the Orient via Toulon, Naples and sometimes Gibraltar the Bibby via Marseilles the Henderson the City and the Anchor from Liverpool the Prince from London to Alexandria to say nothing of the Japanese *Yusen* *Kalsha*, the *Messageries Maritimes* the *Trieste-Lloyd* and the well-organized Italian *Servizi Marittimi*.

Ideal Country for Aerial Travel

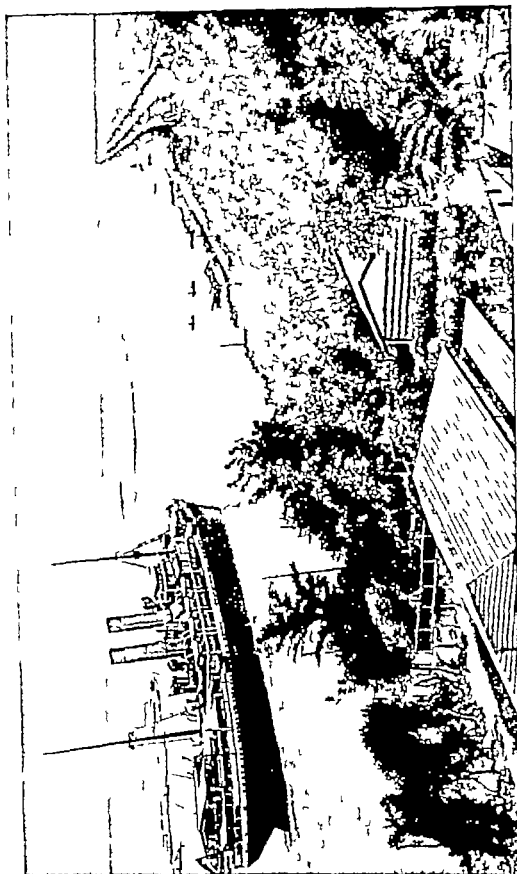
Road journeys are seldom taken when they can be avoided and to avoid them is not difficult since there are few inter urban highways in Egypt. On the other hand airways are becoming used, Egypt being an ideal country for aerial travel. There is already one fine aerodrome established at Aboukir and another at Heliopolis. An air trip between these two points—seven miles each way—is likely to rank one day as a popular pastime. Lord Allenby frequently made it, and Major Blake helped to popularise it. Another air service has been inaugurated between Cairo and Bagdad, the journey taking twelve hours by one route and about fifteen by another. The same trip by sea and river would take several weeks.



Donald McLeish

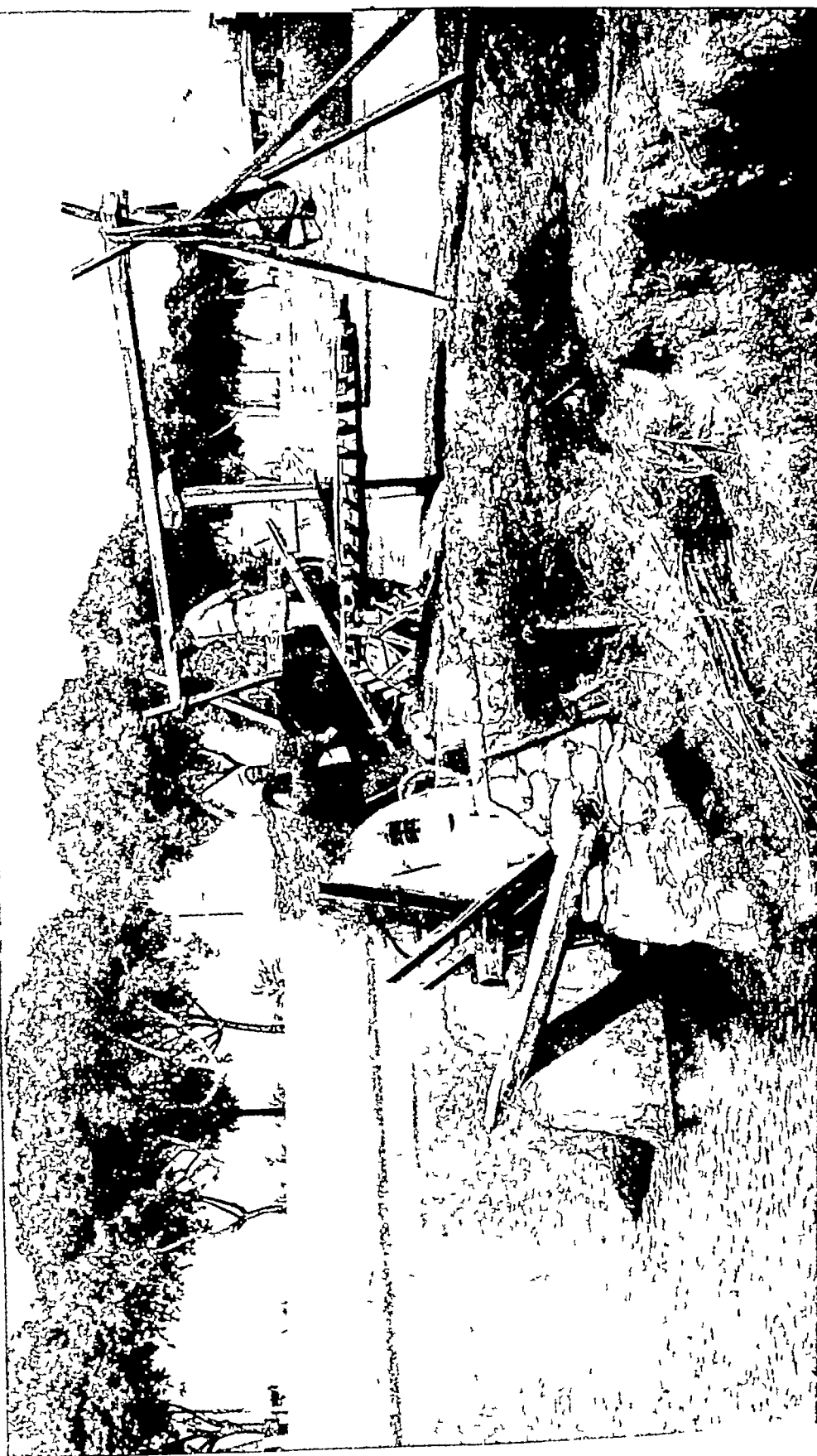
PORT SAID, WHERE STARTS THE LONG CANAL LINKING THE MEDITERRANEAN WITH THE RED SEA

At the end of last century Port Said was no more than a village, now, owing to the traffic of the Suez Canal, it is a town of growing importance and the chief of its district. This photograph, taken from an altitude of 3,000 feet, shows the harbour, which is also the mouth of the canal, and the European quarter. On the left is the open Mediterranean, with the jetties that protect the roadstead from the sea and the Nile mud. In the centre is the Ismaili Basin. The white-domed building on a projection of land to the right is the headquarters of the Suez Canal Company and the square in the centre of the town is the Place de Lesseps.



SHIP CROSSING EL KANTARA, THE OLD CARAVAN ROUTE ACROSS THE ISTHMUS OF SUEZ

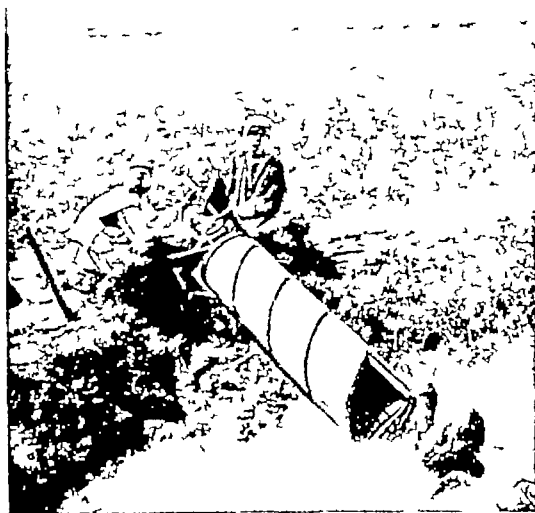
Starting from Port Said, the first 27 miles of the Suez Canal lie through the brackish waters of the Mediterranean Sea. Then, before reaching the Bahah Lakes, the narrow neck of land called El Kantara, the Suez Canal crosses the Isthmus of Suez. Between the Bahah Lakes and Lake Timsah is the deep cutting through the Isthmus of Suez, this project of the famous De Lesseps, at begun, and after ten years of work and an expenditure of £9,000,000 the canal opened to shipping on the left hand of the canal. It thus points the way to the famous Suez Canal, this project of the famous De Lesseps, at begun, and after ten years of work and an expenditure of £9,000,000 the canal opened to shipping on the left hand of the canal.



E N A

PRIMITIVE METHOD OF RAISING THE LIFE-GIVING WATER ON TO THE FIELDS OF EGYPT

Irrigation, now as always, is Egypt's life blood, although manuring is increasing in relative importance since artificial irrigation all the year round has enabled several annual crops to be raised instead of one crop dependent on the natural flooding of the Nile. Steam pumps and irrigation canals of modern construction are used and slide by slide with these are found such age old appliances as the shaduf and the saqiya. This is an example of the latter not far from Cairo, a large wheel fitted with buckets is geared with primitive cogs to a horizontal capstan turned by oxen, camels or asses.



INVENTION OF SYRACUSAN ARCHIMEDES STILL IN USE

The screw is far more simple than the siphon shown in the opposite page, and the merit of bucket and counter weight at the opposite end of long pole pivoted about the point of balance. The Archimedes screw shown here is shown where a vessel need not be raised more than 6 feet; with this limitation it is probably the most efficient of the three methods.

Railway travel remains rather suggestive of Ru kin's dictum "It is not travelling at all—it is merely being sent to a place and very little different from becoming a parcel. Not only are the Egyptian state railways poorly constructed and poorly equipped, but the route traversed is of a wholly uninteresting nature. A journey taken from Port Said or Alexandria to Assuan—that is to say from one end of Egypt to another—leaves upon the mind of the average traveller an impression of deadly monotony, physical fatigue and much actual suffering from dust, sand and a plague of flies.

On the other hand a river trip from Cairo to Assuan or as far as Shellal and thence to Halfa (on the borders of the Sudan) is usually full of pleasure and interest since excluding those stretches of bare and uninhabited country passed en route the journey is as fascinating as the railway transit is disagreeable. Luxurious steamers and dahabiyehs there are in plenty, the former compare with the finest river vessels afloat while stoppages on the way are sufficiently numerous and prolonged to allow passengers to indulge in a little physical exercise and thus throw off the feeling of lassitude.



THRESHING WHEAT IN A FERTILE OASIS OF THE DESERT

E N A

Agricultural implements in Egypt are on the whole extremely primitive, and differ little from those shown on the monuments of four thousand years ago. The plough is just a six foot pole with a bent piece of iron shod wood fastened at an acute angle to the foot, and the thrasher, as seen in this photograph, is a heavy wooden sledge with sharp disks of iron that crush the stalks and ears

experienced in a sultry climate from any prolonged inactivity

Lord Lytton once wrote 'In life there are meetings which seem like a fate', this saying has been applied to Port Said, the "Gateway of the East," at whose portals the most unexpected personal encounters between world-wide travellers sometimes take place. But Port Said is something more than a mere travellers' junction—it is the chief town of the Egyptian Province of the Isthmus and the Suez Canal, owing its existence, indeed, to the last named enterprise. Originally a humble fishing village, it is now a highly prosperous

town, with a busy, noisy and heterogeneous population of nearly 50,000, of which probably some 15,000 are Europeans. With the foreigners came modern sanitation and other civilizing advantages, at first little appreciated by the natives but better understood by them to-day.

Before the work of the unfortunate Ferdinand de Lesseps, Suez was likewise a squalid little Arabic village very like Port Said. Its original 1,500 inhabitants have increased to 15,000 but, this fact notwithstanding, the town, divided into European and native quarters, remains singularly dreary and



BRICKS OF NILE MUD HARDENING IN THE SUN

xx

Along the bank of the Nile bricks are still made in the same manner when the Israelites went into bondage. River mud is thrown into shallow pits, which are added chopped reed or straw for the Nile mud, though highly plastic, is insufficient cohesion. The mass is then tramped with water until thoroughly mixed and shaped in moulds, the brick being spread out to dry in the sun.

unattractive in appearance. Yet both sections are clean while the desert climate is altogether delightful.

The average traveller going to Egypt who tarries not awhile at Alexandria misses one of the most interesting places on the African continent. Solely for the prominent part played in those stirring days immediately preceding the institution of Christianity Alexandria deserves to be visited and its past history studied. It may not now be considered in the strictest sense a beautiful city but assuredly as the former centre of Greek learning and once possessor of the finest library in

the world it must challenge attention. It has suffered many vicissitudes and submitted to many different forms of civilization from the day of its founder the young king of Macedon (332 B.C.) through those of the Ptolemies the Romans the Persians the Arabs the Greeks and the Turks until it fell under the sway of Mehemet Ali and after his brief tenure, of Napoleon. It was bombarded and occupied by the British in 1882. The archaeological interests of Alexandria are real although little has been done to excavate below surface for those priceless historical treasures believed still to be concealed there.

At Alexandria and all along the Delta coast rain falls fairly often in winter, but the air is so dry that all moisture is speedily absorbed. Thus the dreaded scourge of malaria is rarely encountered here, in the Nile Delta or in Upper Egypt never. At Assuan the winter air is probably the driest of any recognized health resort in the world, but in torrid summer it may be compared with the hottest place on earth—Jacobabad, in the Bombay Province of India.

The native population, numbering perhaps some thirteen and a half millions, is composed of "fellahin," the agriculturists, of Arabs from the Libyan and Arabian deserts, and of Nubians and Beduins, all of whom are Mahomedans. The Copts, direct descendants from the ancient Egyptians, are Christians, inhabiting the towns and having their own villages.

The fellah, who with other peasants is usually wholly illiterate, has become a new man endowed with new impulses and new ambitions. The crushed, coerced and cringing creature of the beginning of this century no longer exists. To-day he is represented by a healthier, steadier, more independent

but no less industrious individual, whose sole interest in life is still centred in his crops, and whose main concern is how much or how little water-supply will reach his particular patch of cultivation.

Nor is a reliable and cheap water-supply the only economic blessing that the fellah owes to British foresight and enterprise. The progress made in his health conditions—especially sanitation which previously received little or no attention—means for him cheaper living and a longer life. The average mortality still, however, stands at 32.4 per thousand and higher among children.

The Beduin, who no longer roams the desert with his flocks, but, become a sedentary tiller of the soil, now forms an important part of the rural population, is a better-looking type, hawk-like of feature and sometimes really handsome but inclined to stoutness in advancing age.

Housing conditions have never been so good as to-day. Road macadamising, street-lighting (even in the smallest of the villages) and drainage schemes in the towns with rather more ambitious installations in the cities have distinguished the period of responsible British civil administration in Egypt.

EGYPT GEOGRAPHICAL SUMMARY

Natural Division. A river trench and delta in a hot desert. (Cf the lower Indus and Sind in the chapter on Rajputana and Sind.) The lower Nile, without tributaries, steadily losing volume by evaporation and seepage, flows in a trench in the plateau bordered by sharp-edged steep walls (Cf the Colorado Cañon). Except for the settlements of the oases and the towns of the Suez Canal, all the towns and villages are situated in the Nile trench (or the delta).

Climate. Continental in temperature, with considerable ranges between day and night and between the hot and cool seasons. Practically rainless, once in many months a tropical afternoon downpour may demolish many mud huts and flood the land, but the water is quickly absorbed by the parched earth and the huts are rebuilt almost as quickly.

Vegetation. Land with possibilities of water supply is too valuable to be left uncultivated, and natural vegetation is extremely scanty. Date palms in the oases, useful and ornamental plants in the gardens, depend almost solely upon the

provision of water. *Tamarisks* are in frequent use as sand breaks against the shifting desert sands.

Irrigation. Dams at Assuan and Esneh, barrages at Assiut and Zifta, control the waste of flood water and enable a considerable head of water to be held for distribution to the cultivators.

Communications. The Nile itself is a useful traffic route, winds blow up stream. The railway follows the river to Shellal. The Suez Canal is an international highway, with a railway beside it. One railway goes east to Palestine and another west from Alexandria along the coast. The airway from Cairo to Bagdad is one of the most successful air routes outside Europe.

Products. Cotton (quarter of the world's supply), cane sugar, rice, millet, summer crops, wheat, barley, flax, winter crops, maize, millet and flood rice, autumn crops.

Outlook. Social conditions and hygiene, methods of cultivation and products have been steadily improved, and the future rests with the maintenance of a steady rate of progress.

1—A Panorama of Shire and Town

by Sir John Foster Fraser

Traveler, Lecturer and Author of Many Books on Land and Peoples

I th e e k f m th e f a d p a s t m e f f o m e n e a l
 I h e m f l a n d t e l e d e m t h f o m m e o f t h a t h e t r e
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 k p e f p a r e l e m p l e e t N e m e m d r u p f k I t
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 e r e r f f m e m e m e t h e l a t a n d m e d t h e m e h e r
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 f o r t h e g e o r g e p h y f k I d i o m

EVERY country has much to love that is both useful and quaint. But no country has the same persistent captivation charm as has Old England. There are things, about the land to criticize and characteristics of the people which at first the foreigner finds it hard to appreciate. But making all concessions for shortcomings, there is a homeliness and a sociability which soon turns first contempt into affection.

So when American friends visit us and are inclined to make comparisons to the advantage of their own country I always warn them. If you love the United States so much do not stay long with us for if you do you may have the same fate as many of your folk who have been over here for a year or two. When you get home you will notice American traits you never realized before and you will want to come back and settle amongst us."

Travelli & Belfus at Home

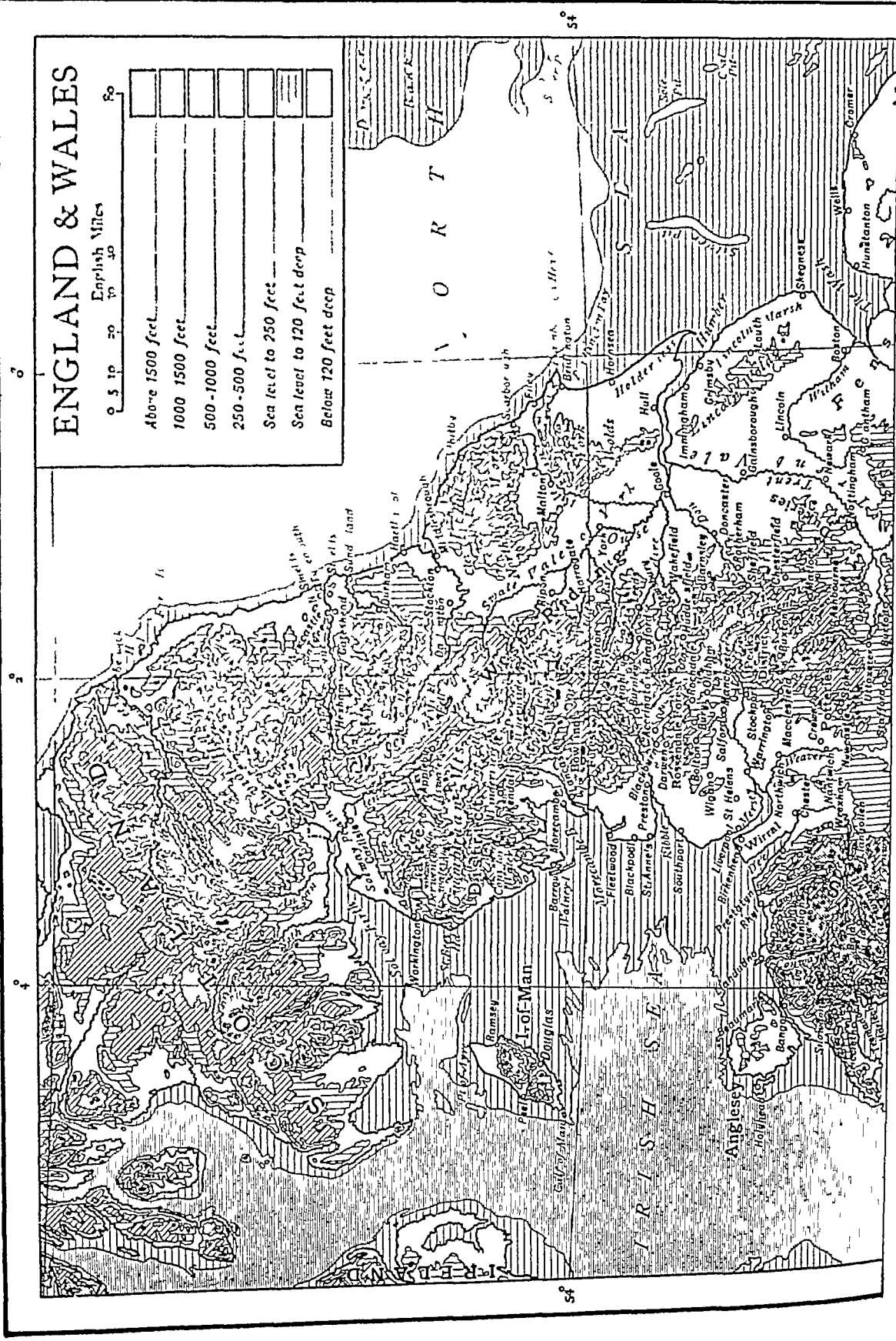
No man's education is complete unless he has travelled but those English people show little wisdom who are always rushing away to the Continent for their holidays to the neglect of their own land which has its admirable beauty spots and vigorous industrial areas, and where there is scarcely a village that has not a little romance

of its own. Very delightful times may be had pottering through happy counties, tawny in old market towns, which suggest pages out of an entrancing novel or lingering in hamlet to pick up with Hodge about the ways of the world.

Local Indi dalam

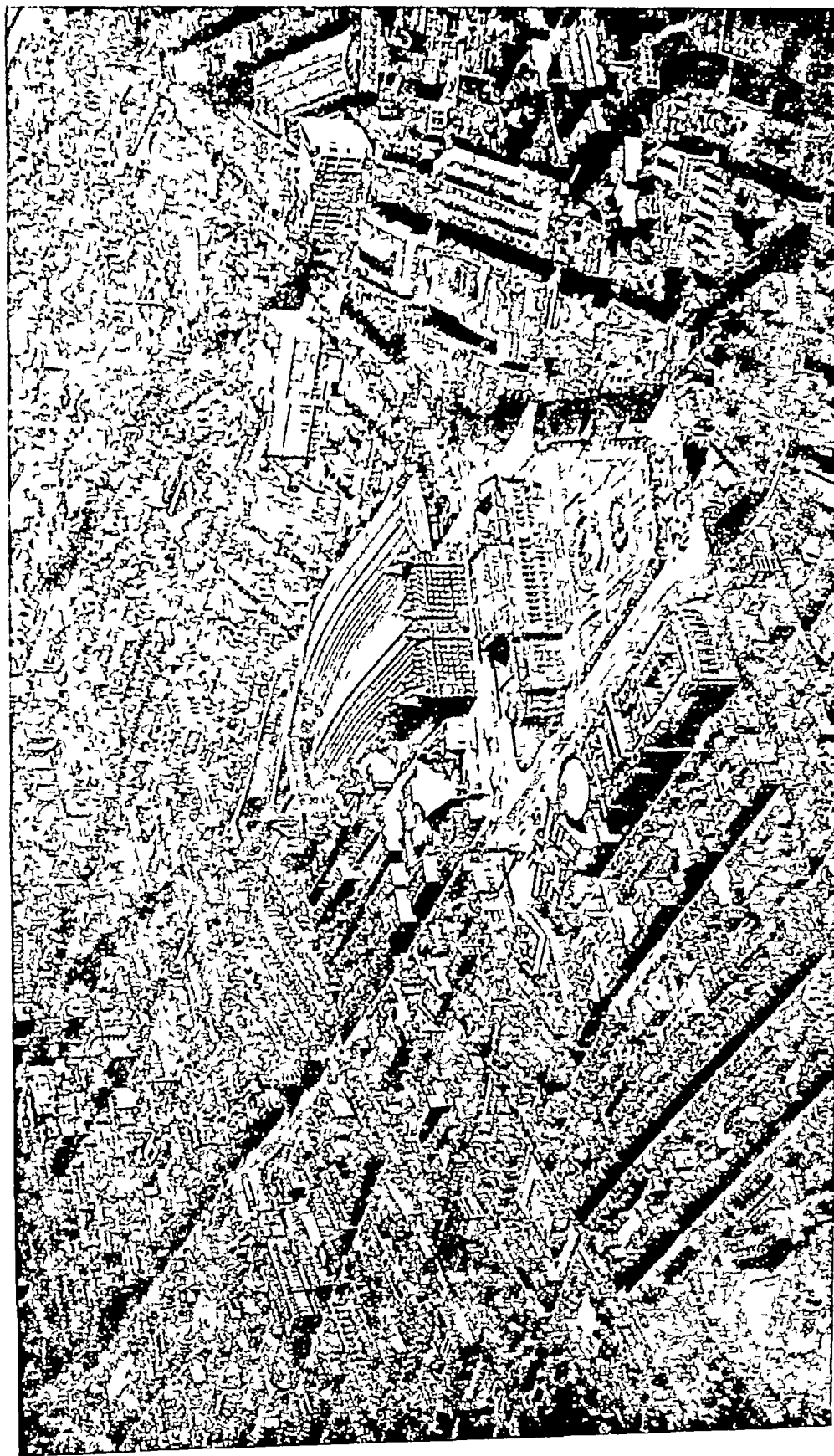
We use the word "English" as though it were an all-embracing term to describe the inhabitant. Yet there are differences, very marked, between the people of various regions—the mental attitudes of the millions who live in the manufacturing districts of Yorkshire and Lancashire and the Midlands, the stolidity of the agricultural areas of East Anglia and the pleasant easy-going and shrewd people of the rural southern climes.

Despite the railways and rapid means of transport which it might be thought would have mixed them into a common mould, there are outstanding features which show how localities will not depart from their independent character. We notice that in the various dialects, so that the man of Durham finds it a little difficult to converse with the man of Somerset. Though next door to each other Lancashire and Yorkshire have fundamental differences, the Lancastrian being fond of debate while



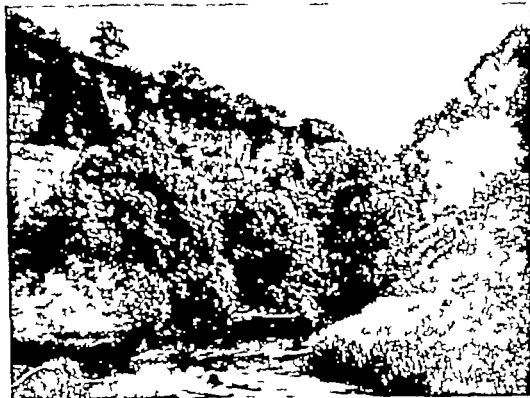


RELIEF MAP OF ENGLAND WITH ITS HILL AND RIVER SYSTEMS, CHIEF TOWNS AND DISTRICTS



Aeroflora Ltd

HEART OF LIVERPOOL, THE SECOND GREATEST SEAPORT OF ENGLAND, ON THE MERSEY ESTUARY
 Liverpool, with its tremendous line of docks and quays stretching for over nine miles on the Cheshire side alone, is primarily a seaport handling one third of the total transit trade of the Empire and a great proportion of the Atlantic passenger traffic. The city contains many magnificent buildings of dignity and distinction. In the centre of the photograph is Lime Street Station and the hotel owned by the London Midland and Scottish Railway. Facing the station is St George's Hall, the crowning architectural feature of the city. On the left are the Walker Art Gallery, the Free Library and the Wellington Monument.



ON THE BANKS OF THE WYE IN A DALE OF DERBYSHIRE

A famous poet once wrote: "If ever you there are things in Derbyshire as noble as Greece and Sicily." By some this may be thought to be exaggerated, nevertheless the impression of Derbyshire is very strong on one's mind on first recognition and in the rugged Peak District the rich scenery with their streams, limestone crags and lush foliage are indeed truly beautiful.

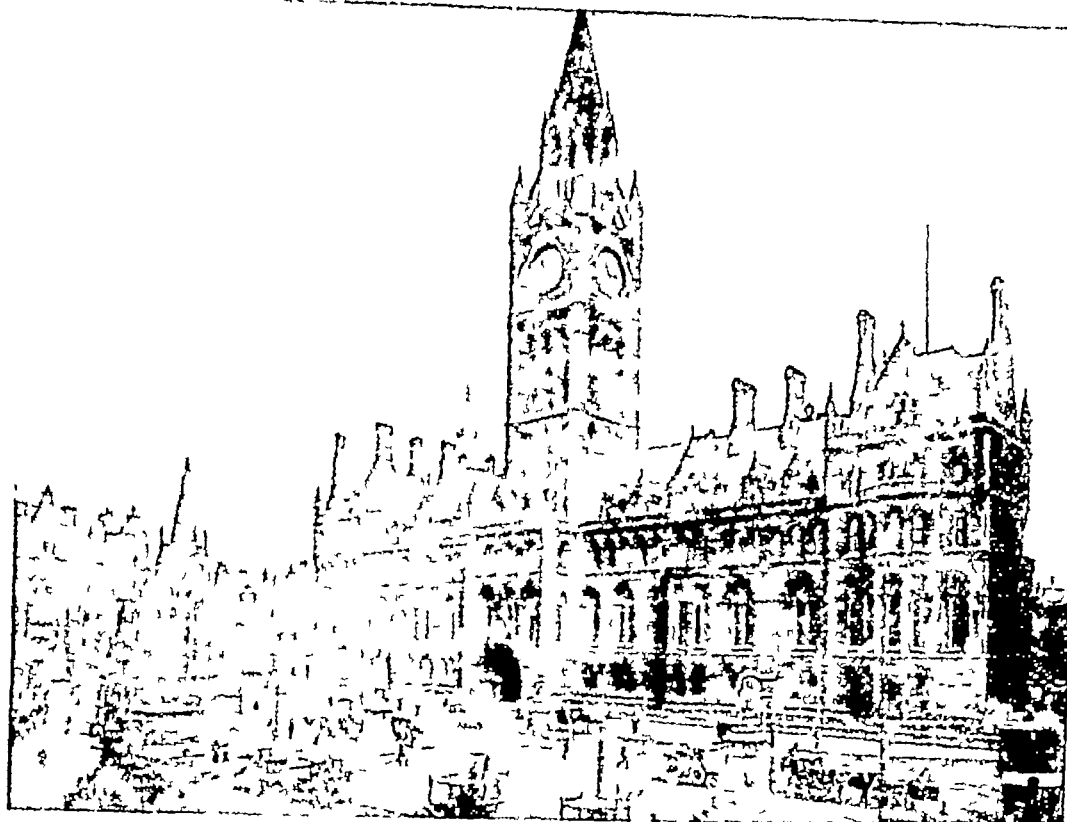
the York hir-man is addicted to sport. All down the eastern coast there is a fairness of countenance which reminds us of the times when the Danes came marauding on those shores while away in Cornwall one often meets people swarthy, even Semitic-looking, a human relic of the days over two thousand years ago when the Phoenicians came to the English West Country seeking tin and lead.

Climate has played its part in developing what seem the local idiosyncracies. So you find the people of the North harder and sturdier than those of the complacent warmer weathered South. Local patriotisms are always to the front. We have evidence of this not only in sport but in the playful sarcasms of rival business towns—the frank opinions the Manchester and Liverpool folk have for each other, the superiority which the Leeds people like to claim over their neighbours in Bradford the

sort of overlordship Birmingham likes to display toward Wolverhampton even the jokes which you hear in Newcastle about Gateshead.

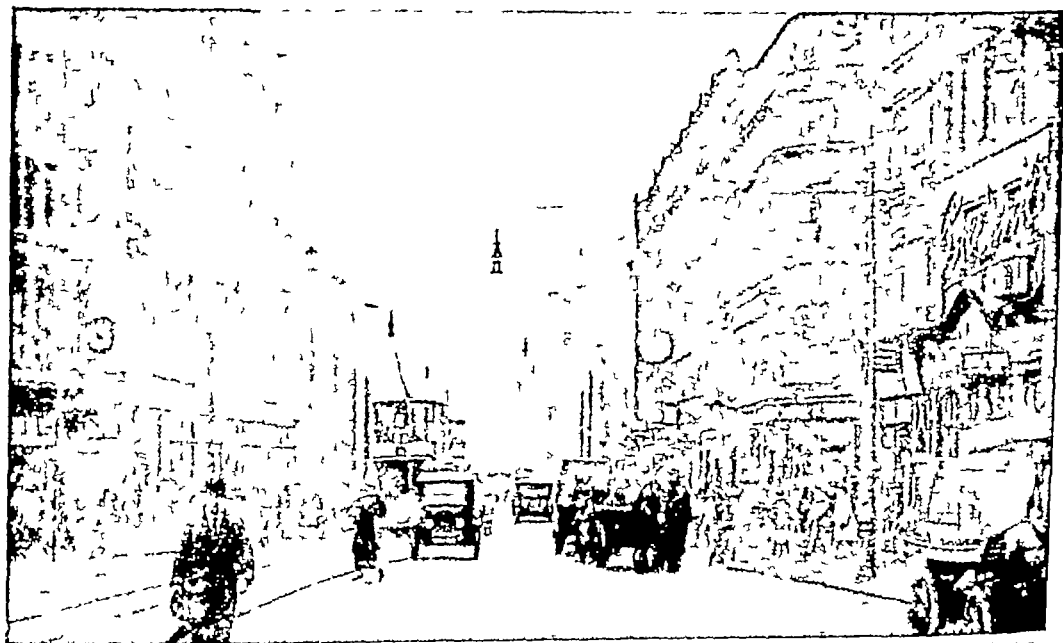
Somehow the impression prevails that the English of the northern industrial countries are keener, more spry in business than the English who live in the agricultural shires. It is to be remembered, however, that when England was first coming into its own in the spacious Elizabethan days it was the men of the South and particularly those of the West who were the founders of its greatness seeking adventure and glory in distant seas, and that it has been within the last century, the age of iron and coal, the woollen and the cotton mills, the big steel and other manufacturing districts, that northern wits have sharpened.

It is natural that men engaged in pursuits calling for technical skill should in time show quickness and readiness,



MANCHESTER'S FINE TOWN-HALL STANDING IN ALBERT SQUARE

Completed in 1877, the town hall is the most imposing edifice Manchester possesses. It is Gothic in style, covers 8,000 square yards, and contains more than 250 rooms. The principal tower, 260 feet high, has a magnificent peal of twenty-one bells, and commands an extensive view, including the greater part of south Lancashire and Cheshire, with the Derbyshire hills in the distance.



Daily Mail Manchester

LOOKING DOWN MARKET STREET FROM PICCADILLY, MANCHESTER

Standing on the Irwell at its confluence with the Irk and Medlock, Manchester is the distributing centre for the cotton and other products of the densely populated area which lies around it. An ill built market town in the time of Charles II, it has grown, with the cotton trade as the mainspring of its development and prosperity, to become the first commercial town of England.

and if iron and coal had been found in great quantities in the southern shires and the same talents had been developed there that circumstances developed, say in the West Riding of Yorkshire and on the banks of the Tyne, the probability is that there would have been the same alertness in Wiltshire and Dorset and Somerset that many people think is peculiar to the people of the North. There is no question of superiority—it is a matter of difference in opportunity.

It is the diversity of its natural resources, the way in which special trades seem to have blossomed in particular areas—the varying attributes of the people frequently accentuated, the personality even the individuality of its famous towns—with none of the T-square correctness of design found in the cities of newer countries—that make England unique.

Irregular Growth of Towns

The English are often difficult to understand, but England preads out a picture of loveliness and accomplishment, history and commerce, romance and the plodding of everyday trade wherever we turn and, because the story is long and sure, we slowly understand how through the centuries this little knuckle-bone of a country stock in the seas on the north-west of Europe has gained preeminence among the nations.

Picturesqueness and sanitation do not always go hand-in-hand. Industrialism and physical well-being are not invariable companions. Newer countries than England have prepared plans for the growth of their cities, just as prosperous, fond parents have mapped out the educational career of their sons from preparatory school to university. But most English cities have just "grown" like Topsy and some of them have sprawled in a disjointed irregular way over the countryside. It is only in the present century that opportunity has been taken to design any general residential districts like the Hampstead Garden Suburb close to London, Letchworth, and other places where the desire

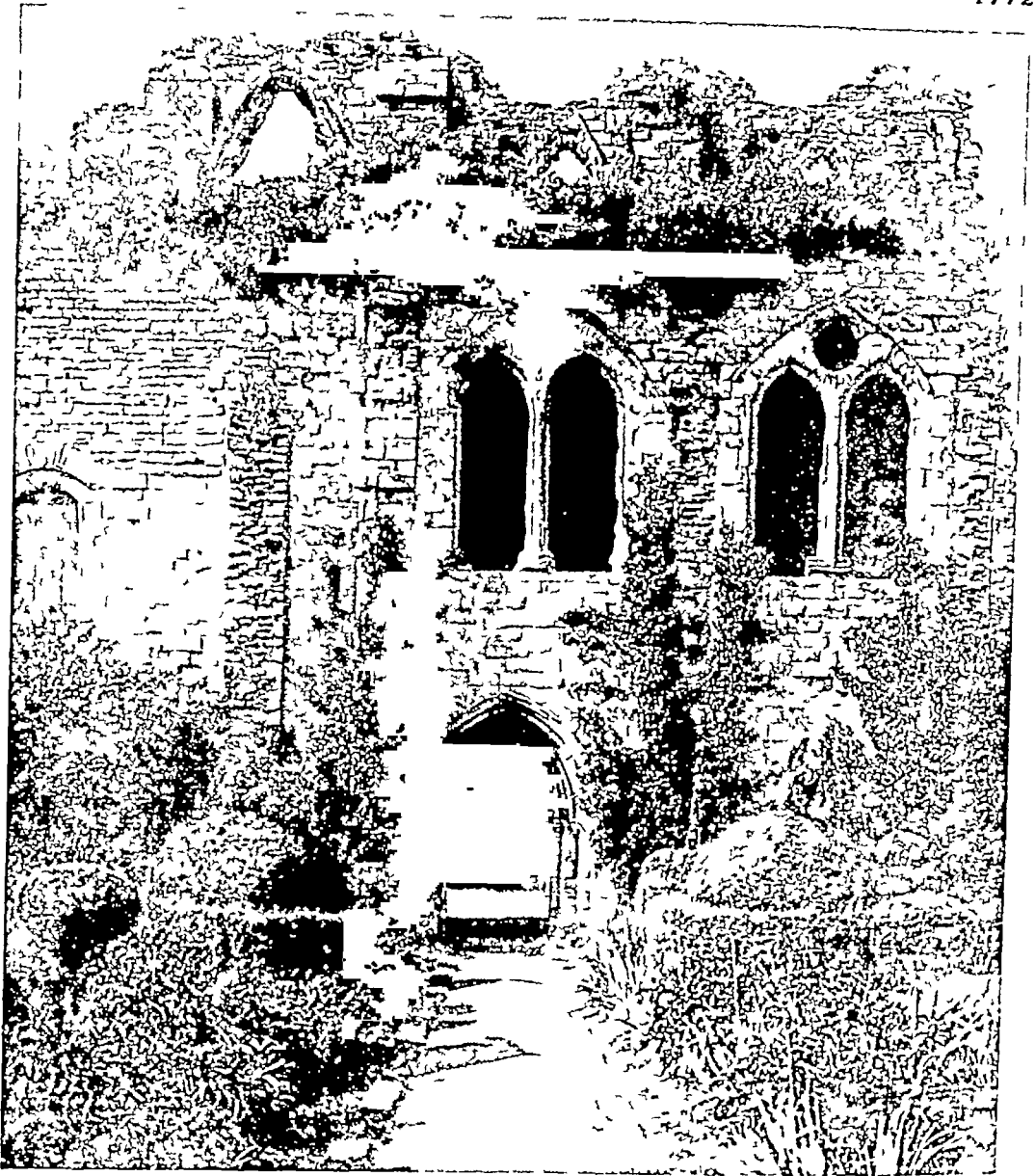
is to combine utility with healthy surroundings. Indeed many municipalities are now considering the art of laying out of areas under their jurisdiction instead of leaving town planning to be a thing of chance.

Experiment in Model Housing

Great industrial firms are beginning to realize the advantages of model towns for the benefit of their employees. One of the first places of the sort was devised by Sir Titus Salt, a Yorkshire magnate who appreciating that good housing means better work, laid the foundation for the well-built, well-making town of Saltaire near Bradford. Lever Brothers turned a marsh on the banks of the Mersey into a delightful colony called Port Sunlight with nice cottages, plenty of gardens and all sorts of educational institutions and entertainments to brighten the lives of thousands of soapmakers. It is very noticeable how much better the health of the children is at Port Sunlight than in the neighbouring and congested boroughs of Birkenhead and Liverpool. Messrs. Cadbury have done a similar useful and attractive work at Bournville outside Birmingham. Other endeavours on a smaller scale have been made elsewhere, all indicating that public conscience regards it as the duty of employers to minister to the moral and physical welfare of their people instead of the relationship being merely one of wage-earning and wage-paying.

Highly Concentrated Population

I have made allusion to the different characteristics between the counties of Lancashire and Yorkshire where although there is a multiplicity of trades, cotton has the foremost place in the first county and wool is the staple industry in the latter county. In the industrial districts of this part of England all within about an hour or so's railway journey of each other there is a population of ten millions, equal to that of all Canada. Lancashire alone has a population far greater than the



WEATHERED RUINS OF AN OLD SHROPSHIRE ABBEY

The Shropshire parish of Much Wenlock contains a picturesque old abbey, founded as a nunnery in the seventh century and remodelled in 1080 as a Cluniac priory. The beauty of the ruins, including those of the priory church, chiefly Early English, and the ornate Norman chapter house, is greatly enhanced by luxuriant greenery which has softened many of the scars left by Time's passing.

total population of Australia. Independent of its industrial position, I would say that Lancashire is the most intellectual county in England.

Manchester, though it has imposing buildings, has no fine boulevards to set them off in sylvan surroundings. There is the rattle and clatter of business, accompanied with a generous amiability and cheerfulness of manner—though the lamp of prosperity is not always burning brightly—which rather distinguishes

the Manchester man from his business friends in other great commercial centres.

Manchester is not swaddled in commercialism. It has a real interest in literature—indeed, for its population it has almost, though not quite, as good a display of first-class booksellers' shops as Glasgow—and such shops in any town are always an index of the mental calibre of the people. Manchester was the first of the provincial cities to show a real interest in good music. In

theatrical art Manchester may be said to be ahead of London, for the folk up there like an appeal to their brains as well as to their middle faculty. Manchester has produced a little school of dramatic writers of its own and owes a great deal to the stimulating influence of Mrs. Hemmings, who in producing plays has the right more of their artistic qualities than of their literary training capabilities. In journalism, the "Manchester Guardian" by word and maintains a high standard of journalistic probity.

The town has been described as "the home of living causes." It may not be exactly true that what Manchester thinks to-day the rest of the country will think to-morrow, but the political influence of the town ever since it took a foremost part a century ago in agitating for better electoral representation of

the people and, later, was the head quarter of the Free Trade movement led by Cobden and Bright has always exercised considerable power in directing political changes in the country. Manchester more than any other town has played a prominent part in the co-operative and temperance movement.

There is a dignified air about the town hall but most of the public buildings are cramped in narrow and sometimes mean streets though Manchester was a little alarmed of displaying what is really valuable in its civic life especially its museum and its art galleries. The university with its two thousand student is one of those modern institutions a little distinct from place of learning like Oxford and Cambridge where there is a jealous aim to combine culture with the progressive needs of the generation.



STOKESAY CASTLE, SHOWING THE GATE HOUSE AND PILGRIMS' QUARTERS

Stokesay is a village in Shropshire named after a famous coaching inn. It is renowned for its castle which dates from the thirteenth century and is one of the finest examples of a fortified and moated manor house in England. The moss-grown roof, the crumbling grey walls and the quaint, half timbered pilgrims' quarters, all speak of bygone ages and departed splendor.

in which we live, an application of the fact that modern science, medicine, laws of commerce, technology, and the like are at least just as necessary to national welfare as acquaintance with the Greek poets and the system of jurisprudence in ancient Rome.

Manchester's Great Achievements

Manchester University, or the Victorian University of Manchester, to give it the correct name, provides one of the many instances of Manchester citizens having large sums in order to elevate the dignity of the city. The university is a development of Owens College which was founded under the will of John Owens and opened in 1851. There is the Whitworth Institute which contains a remarkable collection of water colours, a bequest of Sir Joseph Whitworth and also the John Rylands Library presented to the city and endowed by Mrs. Rylands in memory of her husband—a wonderful library of a quarter of a million volumes including several thousand famous manuscripts and Bibles in over three hundred languages.

But perhaps the most important of Manchester's many achievements was the construction of the great ship canal, thirty-five miles long, connecting Cottonopolis with the Mersey and the sea, and thus in foreign business saving the necessity of transshipping by rail from Liverpool. Manchester, which was an inland town, has been made into a great port. Ships up to 12,000 tons can use the canal.

Finest Docks in the World

In a way Liverpool is a sort of rival to Manchester. It claims to be rather superior. Thus in one place you hear of Manchester men, in the other you hear of Liverpool gentry! I have heard the statement made at a dinner-table that Manchester ladies slip over to Liverpool if they want to keep in touch with the fashion. I know of no place in the country where there is such an air of solid prosperity, represented by dignified buildings, not only belonging

to the municipality but owned by private firms. It is the principal jumping off place for America, though Southampton has become a serious competitor.

Liverpool used to be notorious for its slums, chiefly occupied by dock labourers whose fathers originally set out from Ireland for America and never got any farther than Liverpool. But a vigorous and progressive municipality has done a great deal to demolish the slum areas and to erect serviceable and healthy tenement houses in their stead.

It is claimed that the Liverpool docks, with twenty-seven miles of quays and handling three hundred million pounds worth of goods every year, are the finest in the world. There is always a medley of confused nationalities, from visitors to stokers drawn from all corners of the earth. One of the streets is occupied mainly by Chinese. Most of the public buildings with a leaning to the Greek style, occupy fine sites, like the great St. George's Hall where many notable gatherings have taken place, and the Walker Art Gallery, which has undoubtedly one of the most distinguished collections of pictures in the world.

Romance of Liverpool's Cathedral

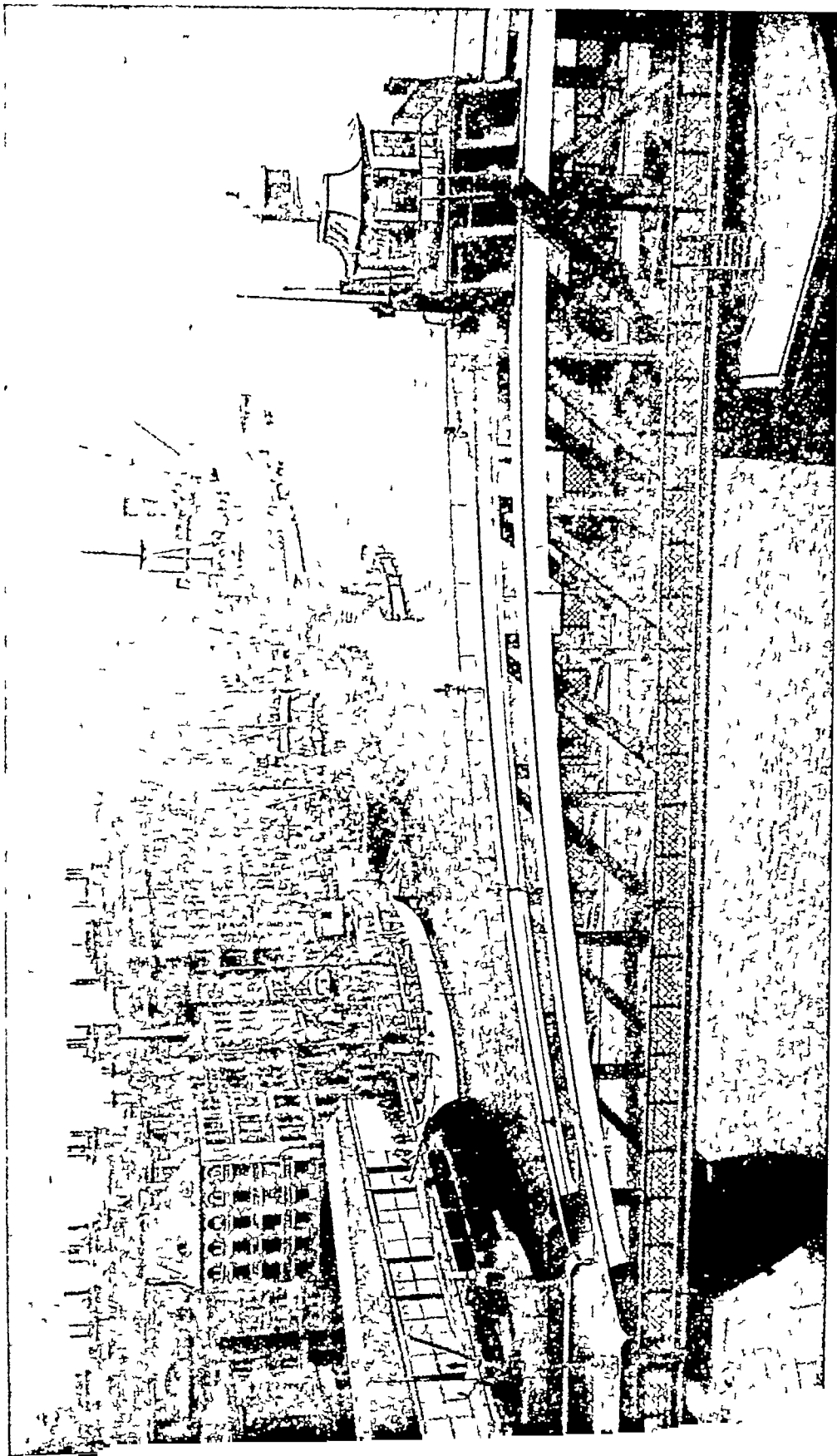
The dominating building is the cathedral, dedicated in the summer of 1924, after twenty years of building. Once, when I was having a winter holiday in Switzerland, I came across a lad of about twenty being much admired by a host of children because he was building for them a snow church. He spent a whole afternoon constructing it, and when night came and candles were put inside and shone through the coloured glazed paper from Christmas crackers used for the windows the effect was fine. I said to the lad who had made the church, "What's your name?" He replied, "I'm Gilbert Scott, and my designs for a new cathedral at Liverpool have just been accepted." Long years later I was his neighbour at a Royal Academy banquet and we both recalled our meeting in the Swiss mountains. Now his



DANIEL BROWN

FAMOUS BRIDGE IN NORTHUMBERLAND'S COUNTY TOWN

The picturesque old Newcastle is rapidly being modernized out of existence but the portion of the town remaining parallel with the left bank of the river Tyne, still contains some old structures, one whose beauty was in striking conformity a triumph of daring engineering work—the High Level Bridge built by Stevenson in 1846-49, on which the railway from Gateshead crosses the Tyne



Donald McLeish

NEWCASTLE, WITH ITS BUSY RIVERSIDE, AND THE SWING BRIDGE ACROSS THE TYNE

Newcastle stands eight miles from the sea on the north bank of the Tyne. It is the centre of a large coal mining shipbuilding industrial and agricultural area. There are great shipbuilding yards where battleships and merchant vessels of all classes are constructed while the Elswick engineering and steel works turn out all kinds of heavy ordnance locomotives marine engines and iron and steel goods. The river is spanned by six bridges the Swing Bridge being built on the site of the Pons Aelii of Hadrian. Along Quayside below the bridge is situated the Customs House.

great work is growing to completion and the King has knighted him. Liverpool Cathedral is the largest in England, covering an area about twice that of St Paul's. It is an architectural triumph. One of the most charming—that is the right word—charming features is the Lady Chapel with its windows commemorative of distinguished women in all ages, with figures of English women saints and the names of worthy women on the staircase, and over the porch a gathering of statues representing the children mentioned in the Bible.

Liverpool does not consider youth a crime, for it is interesting to recall that whilst the building of the cathedral was given to Gilbert Scott when he was only twenty-one St George's Hall, in many respects the most imposing building of the kind in England, was designed by Harvey Lonsdale Elmes when he was only twenty-four.

Two Ports of the Old Slave Trade

In many ways this great city by the Merseyside is distinctive. Is not the Grand National Steeplechase run at Aintree, only five miles away and is there not Everton, where the toffee comes from? And the adjacent residential towns, with the stamp of comfortable prosperity upon them, tell of its success through many generations. These adjacent towns include delightful Southport which among its other attractions is alleged to have a larger number of widows in proportion to the population than any other place in the country.

There was a time when Liverpool—it is said to have derived its name from a mythical bard called the *Liver* (you pronounce it *lyver*) which is incorporated in the city arms—was a mere village compared with Bristol, whence the Cabots sailed to discover America. The two ports were engaged in the slave trade a couple of centuries ago carrying negroes from Africa to America, though families who owe the origin of their fortunes to that traffic do not talk about it. It was the building of

magnificent docks at Liverpool and at Birkenhead on the other side of the Mersey so capturing most of the transatlantic trade, that seemed to push the old town of Bristol on the Avon into a sort of backwater. Now however the citizens of Bristol have become very much alive to the commercial advantage of their position, with many millions of population gathered as it were at their backdoor in the Midlands, and by the construction of the great docks at Avonmouth their town is again in communication with distant lands.

Bristol and the Colston Feast

Shipping is increasing to say nothing of enhanced business in regard to the two things with which Bristol is associated in the popular mind, the manufacture of tobacco and chocolate.

Bristol is a pleasing old city with many quaint relics of the romantic past when it was playing a leading part in opening up English maritime trade before the loss of the American colonies and the abolition of slavery seemed to bring decay to its prosperity. There are gabled houses to remind one of bygone times. The old merchants in their generosity left many bequests from which Bristol of to-day profits. Every body has heard of the Colston Feasts.

Rivalry in Benevolence

Edward Colston, a great merchant adventurer of the seventeenth century and a joyous benefactor is commemorated not only by a monument but by four societies on every November 13—the Dolphin Society which is Conservative in character, the Anchor Society which is Liberal, the Grateful which is non-political, and the Colston the oldest. Then all the men who are proud to have been born in Bristol, and have taken part in keeping its commercial fame clean, dine together with political bigwigs and others down from London to address them, and they enter into splendid genial rivalry by contributing money to the many benevolent funds. Bristol has ever been famous for

hospitality and thinking of the needy brother. The rush and push of utilitarian modern life have done much to despoil many of our cities of their architectural glories, but Bristol, progressive though it is, retains much of the charm of a medieval town.

Ports that Fathered the Fleet

Telling the story of the ports of England would fill a volume. Whenever I wander through the crooked streets of Dover, or go golfing at Sandwich, with its sluggish little brown river, or spend a week-end at Hythe, or roam over the Romney Marshes, or seek a quiet holiday at Hastings, I try to picture these to myself as the Cinque Ports, which in the time of the Tudors furnished ships for the Fleet and are really the parents of the British Navy. These five ports were aided by Winchelsea, which nowadays seems to have got back a long way from the sea, and by Rye, which seems to me like an old town in a story-book come into reality, and is, I always insist, the quaintest and most fascinating place in England. The glory of these places is but a faded memory. Dover still has its important place in defence, but when we think of the Navy our minds go to places like Plymouth and Devonport and Portsmouth.

Plymouth and America

Plymouth and Devonport and Stonehouse make up what are known as the Three Towns, and while soldiers and sailors are numerous about the fortress, a considerable portion of the population is engaged in the dockyards building warships. I fancy Plymouth men carry themselves with just a little special swagger in appreciation of what the sons of Devon have done in creating the far-flung Empire—Cecil and Drake and Hawkins and other bold seafaring men—especially on a fine evening as you see them sauntering on the Hoe, where Sir Francis Drake was playing bowls when the Spanish Armada with concert in their swollen gallants saluted

the shores of England, so battered were they by Drake that few ships of the Armada ever saw the tawny coast of Spain again. The association of Plymouth with America is interesting. It was from here the Pilgrim Fathers sailed in the Mayflower to found a new nation, it was here that the first aircraft to cross the Atlantic settled, and when the House of Commons admitted women to membership, Plymouth was the first to have a woman representative, Lady Astor, an American by birth.

A Vision of Admiralty

Plymouth is a great naval fortress, and in the Royal William Victualling Yard there is continually in storage everything to commissariat the Navy. Important and frowning naval and military establishments seem to dominate the architecture of Devonport. Here are the famous Admiralty dockyards, where many of the finest war vessels have been built. A dozen or so miles away is the Eddystone lighthouse, its two flashes every half-minute eagerly watched for in the black night by Englishmen who, having served their country in distant lands, feel the joy pang on sighting this first evidence they are nearing 'home'.

But the chief naval station—though it has not the same historic importance as Plymouth—is Portsmouth, with its fine harbour and splendid roadstead of Spithead, where some of us have seen the most imposing of naval reviews. The one I remember best was in 1911, when the whole fleet rode out to sea in battle array, few of us apprehending though the Sea Lords knew that all this stern equipment was in preparation for the mighty war with Germany which would burst in a few weeks time. The Royal Dockyard with its dry docks and repairing basins and miles of wharf and a tradition of a high efficiency which makes one proud of one's nationality. Not far away is Southsea, a pleasant watering place and a haven of refuge for the fleet in case of emergency. Of the hotel there are to



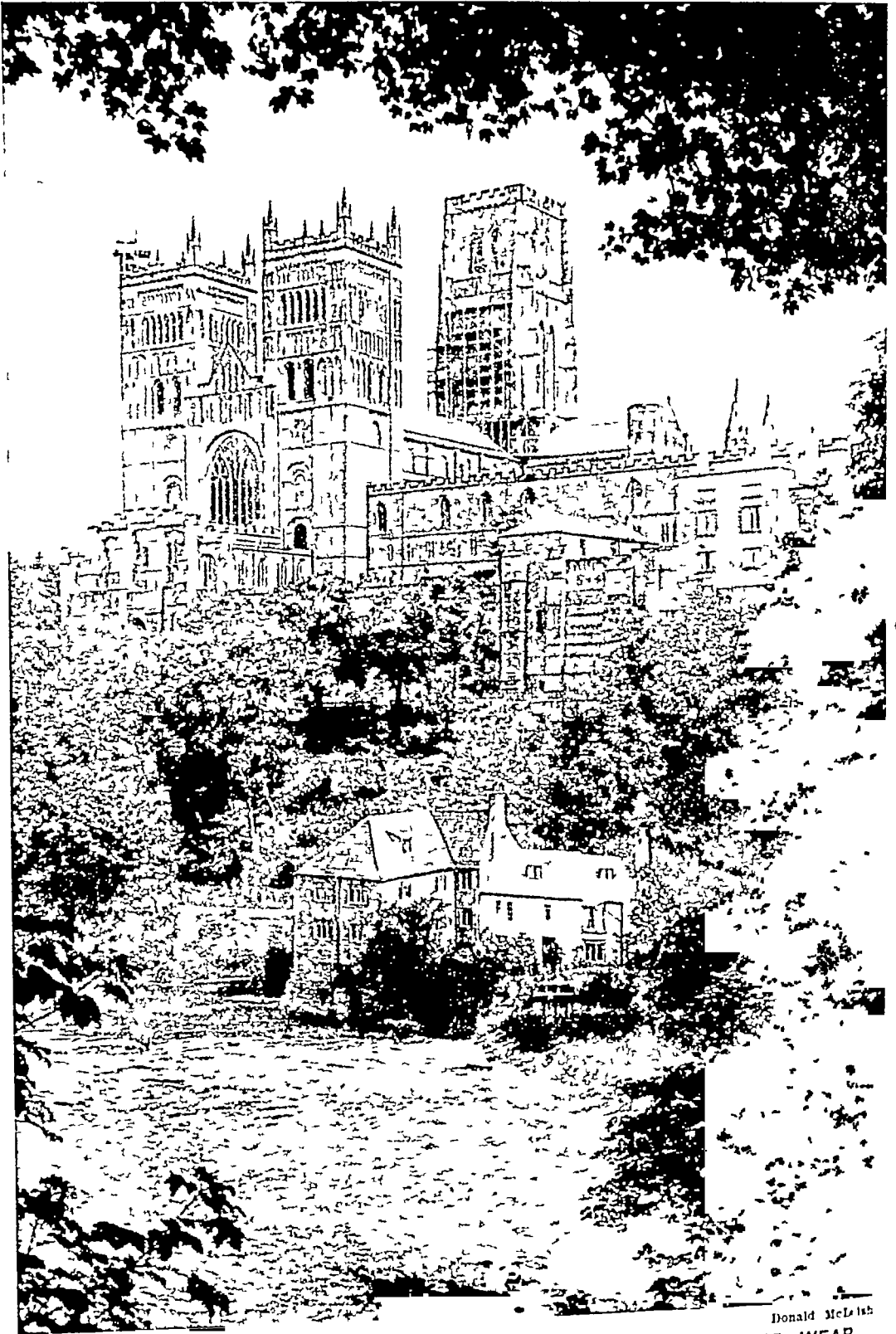
STATELY FORM OF FOUNTAINS ABBEY SEEN FROM THE SOUTH

Founded in 1132 and only completed some 200 years later Fountains Abbey in Yorkshire three miles south-west of Ripon is one of the largest and best preserved Cistercian houses in England. Among the extensive ruins are the church with its tower which rises at the end of the north transept and is a specimen of Late Perpendicular the chapter house and the magnificent cloisters.

be heard many stories of doughty deeds not recorded in ordinary history books.

Not far away is Southampton which during the present century has developed from being an antiquated town with buildings centuries old into one of England's most important shipping centres. Indeed with its magnificent docks, it can accommodate the biggest

vessels that ever crossed the ocean—the Berengaria, the Mauretania, the Aquitania and the like which would find it hazardous to seek a way up the tortuous channel of the Mersey to Liverpool. One does not appreciate the size of these great steamers until one sees them lying alongside the docks and towering above all the neighbouring



Donald McLeish

DURHAM CATHEDRAL SEEN UPON THE WOODED BANK OF THE WEAR
 Durham Cathedral, a monument to S Cuthbert, is a massive pile of Norman architecture, commenced in 1093. The Galilee Chapel, at the west end, is a notable feature, as are the central tower and the chapel of the nine altars. The choir is terminated by the Neville altar screen, and on the south of the choir is the Bishop's Throne, part of which is the memorial to Bishop Hatfield.



YORK MINSTER THE DIGNIFIED AND MASSIVE CHURCH OF S. PETER

Famous especially for its finest and representative series of stained glass windows the minster includes examples of the Early English, Decorated and Early and Late Perpendicular styles. On both sides of the main west facade rise the richly decorated towers, 211 feet; in the north the taller tower is known as the bell tower called Great Peter. The central tower or Great Eastern rises 216 feet.

buildings Not only are there to be seen the giant liners which ferry the Atlantic between England and the United States, but ships that sail for South America and the Pacific, and the magnificent fleet that is constantly journeying to South Africa and back

Southampton's Twin Tides

A local story has it that it was here that Canute rebuked his flattering courtiers, who declared that as king he could order the incoming tide to stop. It is useful to know, and very advantageous to skippers of large craft, that it has two tides, one which comes up from the Solent—with the lovely Isle of Wight across the way—and another which comes swirling round by Spithead a couple of hours later.

Amongst its various docking facilities, Southampton has the largest graving dock in the world. Though a busy port, every week receiving and sending away thousands of travellers, it is a town pleasant to wander in, with its Bar Gate, eighteenth-century inns, the Hospice of St Julian, its Saxon walls, its Wind Whistle Tower and Bugle Gate, and God's House Gate, names the very mention of which conjures up pictures of long ago, when the town was not so busy but life was more thrilling and picturesque.

Great Harbours of the Humber

There are many things accountable for England's greatness on the seas, but the part fulfilled by her seaports, whether naval or chiefly concerned in extending commerce, must be first in our remembrance, whether we think of Chatham, on the Medway, which since the time of Henry VIII has been one of our main defences, or of quite modern Immingham, on the sombre banks of the Humber, with its docks with every up-to-date equipment rapidly increasing our trade with the Baltic ports, and its ships outward bound with British wares and returning with timber.

On the north side of the Humber is Hull, one of the most hustling East

Coast towns, with not much to show the mere sightseer, but alert with true Yorkshire thoroughness, exporting much coal from the West Riding collieries, and having an expanding trade not only with Scandinavia, but with more distant regions of the world.

It has been foolishly said there is no romance in trade. I never visit Newcastle or sail on the Tyne without the consciousness that here is one of the first chapters in the book of England's prosperity. There is a special quality about these Tynesiders, the Durham men and the Northumbrians, a sort of blunt geniality, a fine regard for efficiency, a lively concern in politics and public affairs generally, and a certain craze for sport, all of which seems to make them a distinctive class amongst the artisans of the country.

Newcastle's Engineering Associations

With all their excellence in workmanship, I should say they are keenest about sport. Just as the Sheffielder, after toiling in the steel sheds of Brightside and Attercliffe, finds his relaxation in taking train to some modest stream and trying to catch fish, so the Tynesider, after a week in the shipyards or the armament works, or in the adjoining coal-mines, finds his main joy in training whippets (small greyhounds), and on Saturday afternoons keen competitions between hundreds of whippets are held, when the excitement rises as high as in the half-hour before the Derby is run at Epsom.

Newcastle is intimately associated with the best type of English engineering—Robert Stephenson built the remarkable High Level Bridge which spans the Tyne and over which all the East Coast trains to and from Scotland travel—for here are the great works of the firm of Armstrong, and all down the river bank are shipyards, which have given such vessels as the *Mauretania* to the world. Indeed, the whole of the Newcastle district is one of the best examples to be found of energetic industry.



Bartholomew

LINCOLN CATHEDRAL, TOWERING ABOVE THE CITY SEEN FROM THE STRAIT

Lincoln is an ancient city and has a rich history. The cathedral is one of the most magnificent in England though little remains of the original structure begun in 1082. It is a fine example of English Gothic architecture. The view is from the street and the cathedral is seen from the street. The view is from the street and the cathedral is seen from the street.

Writing of the steel business makes one take a jump to Sheffield, which, when viewed from a railway train on a rainy, murky day, is only to be equalled by the Potteries, under similar conditions, for dismalness. Not so very long ago narrow streets, grime and a heavy acrid atmosphere seemed to be the chief characteristics of Sheffield. During the present century, however, enormous improvements have been made by widening the main streets and by the erection of a noble town-hall. Yet though nobody would say Sheffield has any claims to be a health resort, it is close to some of the most exquisite and impressive scenery in the West Riding of Yorkshire and in Derbyshire—indeed, it is astonishing in how short a time one can get away from the heavy, dirty, sulphurous air into districts that have innumerable rural charms.

The City of Cutlers

With its half million of population it is the centre of the steel industry, and huge concerns like Cammells and Browns have produced the finest armour-plating for warships in the world. Besides having a worthy fame for steel construction on a big scale, the city has a unique reputation for the quality of its cutlery. "Sheffield plate" is the delight of collectors in all countries. The Master Cutler ranks equal with, even if he does not surpass in dignity, the Lord Mayor, and the Cutlers' Feast, which is held every autumn, following the installation of a new Master, is generally an occasion seized by some members of the Government of the day to make an important announcement.

Yorkshire's Hive of Industry

Politically, Sheffield has been inclined to show a stern independence, and in the old days was one of the first constituencies to return an "independent" member to Parliament, John Arthur Roebuck. John Ruskin founded a museum here, and there is an art gallery given by the Mappin family, associated in many ways with the fortunes of the

town, while the university, incorporated in 1905, is in its curriculum more akin to the modern progressive United States universities than it is to the old English seats of culture.

In this part of Yorkshire one is in the most busy manufacturing region on the face of the earth. For besides the steel works in Sheffield and Rotherham, there are innumerable mines yielding the first quality of coal, and Leeds is famous for quality and the magnitude of its output in woollen materials. The district, with such towns as Bradford, Halifax, Dewsbury, Huddersfield, Wakefield, Barnsley, Shipley, and the like, is a hive of industry, with a population of about four millions.

Wool is the staple manufacture, cloth-making having been brought to Yorkshire by men from Flanders three hundred years ago, though it was not until about a century ago that the West Riding began to gain a position of preeminence, but there are many other trades, with engineering coming as a good second in importance to the woollen mills.

Supremacy in Cloth Making

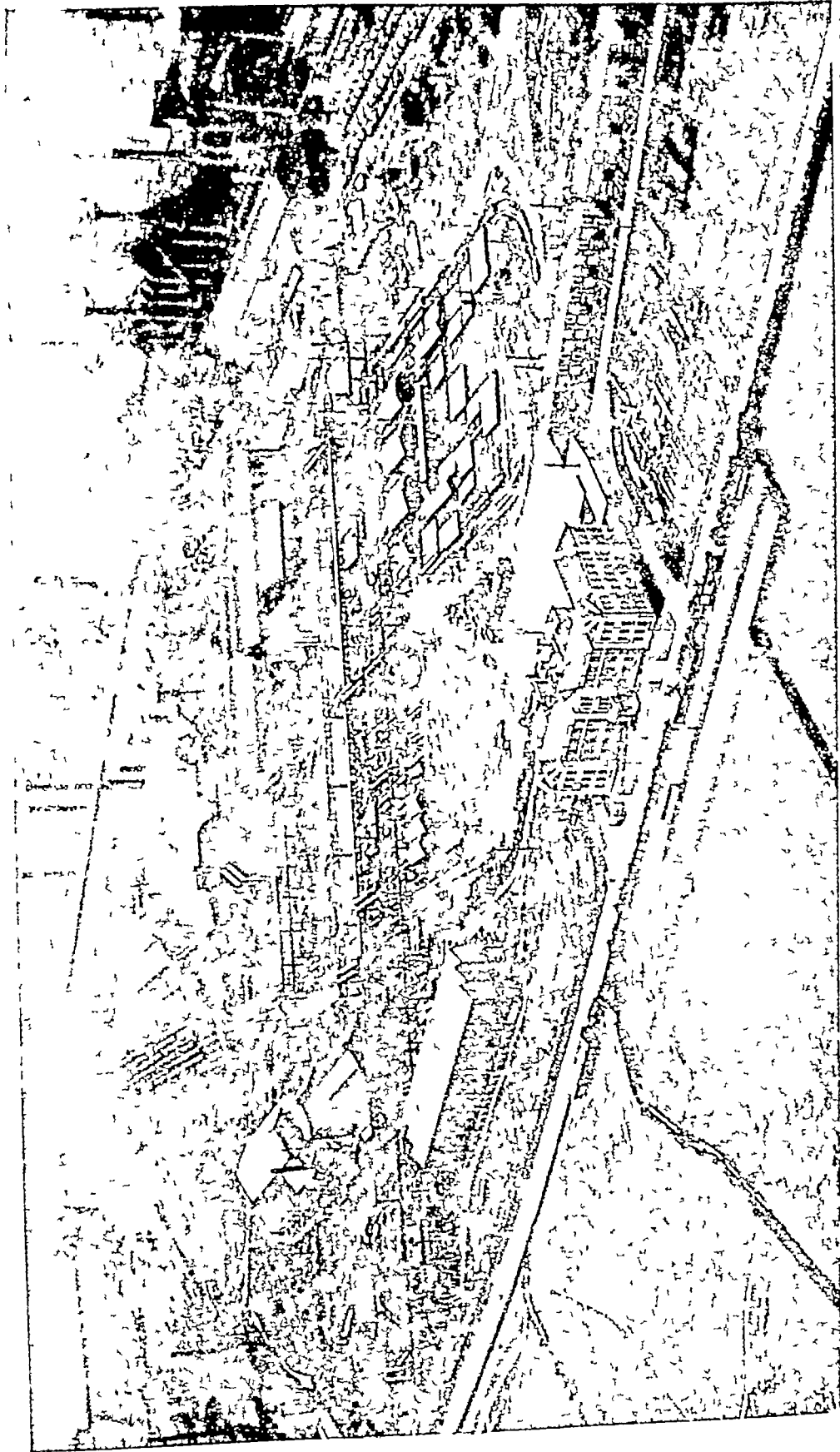
Until comparatively recent times a great deal of the weaving was done at home, but now it is almost all done in the mills, many of them fine airy structures. A most impressive sight on a dark winter night is one of the Yorkshire dales, like the Colne Valley, filled with mills from the windows of which thousands upon thousands of stacked lights, as it were, are gleaming. Working in the mill has become almost a hereditary occupation, and this accounts in some measure for the quality of the material produced. Certainly West Riding goods have a merit which cannot be surpassed in any other country. Countries like the United States and Germany can provide a good second-class cloth, but for the very best quality Yorkshire is supreme. The water from the moors has special ingredients which improve the wool, and this, together with the rather damp atmosphere, gives the West Riding an



G. P. Abraham

IN THE HEART OF WILD NATURE IN THE ENGLISH LAKE LAND

Soft, mossy, steep heights, tranquil lakes, rippling streams and turbulent waterfalls constitute the rugged and beautiful region of Cumberland, Westmorland and a small part of Lancashire known as the Lake District. Wastwater in Cumberland, the wildest and deepest of the lakes, is some three miles long and has its foot embowered in rich foliage while its head is overshadowed by tall peaks.



MIDDLESBROUGH DIMLY SEEN THROUGH THE DENSE CLOUDS OF SMOKE BELCHED FORTH FROM SCORES OF TALL STACKS
On the south side of the Tees estuary Middlesbrough is the commercial centre of the ironstone mines of the Cleveland district. The city is wholly modern and has foundries, furnaces and other works for the production of iron and steel on an enormous scale. Engines, boilers, chemicals and concrete are made, and salt is produced. The river forms a harbour protected by two breakwaters. In it are capacious docks and shipbuilding yards. Its chief buildings are the fine town-hall with a lofty clock tower and spire, the exchange, Dorman memorial museum and the Roman Catholic Cathedral.

Aeroflms Ltd

advantage over other areas where woollen cloth is made.

The rattle of the weavers' clogs hastening to work is not heard so often nowadays, but the mill lasses retain the old habit of wrapping their heads in shawls when going to or returning from work, so that to the casual visitor they suggest an appearance of drab poverty. That is not at all their plight—they are merely following the custom of generations. On Sundays and holidays these girls dress as well and as prettily as any artisan class of women in the land.

Diverse Middle and Manufacturing

What is known as the Midlands presents a great diversity of towns following particular trades. Nottingham with its lace making, a clean business, and with the claim that its lace hands are the prettiest girls in the land. Leicester devoted to hosiery. Northampton to boot making. Coventry to motor cars and bicycles. Stoke, Hanley, Burslem, Longton, Tunstall having interest centred in pottery. Kidderminster making carpets. Wolverhampton devoted to ironware. Reading to biscuits and Birmingham holding the credit of manufacturing more jewelry than is made throughout the rest of the country. Besides these, there are such places as Burton-on-Trent, renowned for its ales. Derby Rugby and Crewe, great railway depots.

All these places have characteristics, town individualities, localisms which develop a useful patriotism. Birmingham takes pride that in civic improvements it has long given a lead to the other great provincial cities. It has a lively interest in things educational, which explains some of the tremendous fervour it has displayed in great reform agitations. It has often had great political names associated with it, like those of John Bright and Joseph Chamberlain. For vigorous expression of liberal thought Birmingham is not outdone by any city.

Though folk who do not belong to the Midlands find a twisted satisfaction in

speaking of Brummagem goods, a sneer that there is a good deal of rubbishy tinsel adornments, gewgaws and idols made for distant heathen lands—which is probably true—the town and neighbourhood have a big share in furnishing the world with necessary articles ranging from screws made by Nettlefolds to materials of war at Kynoch's.

Where the Coppers Come From

Indeed, though pledged as a city to social amelioration and broadmindedness in all things religious and political, Birmingham's prosperity has been linked again and again with enormous output of armaments in time of war. Birmingham also makes, not only for Britain but for other countries, most of the bronze and copper coins in circulation. Each English town seems to be associated with some particular product and while this applies to Birmingham, so far as public knowledge goes, the fact is that there is no other place where such a variety of trades is followed. Another distinction is that while elsewhere the whole tendency is toward the elimination of the small employer the sentiment in Birmingham is much more toward the continuance of the little factory with the master and half a dozen men working together.

Heart of the Black Country

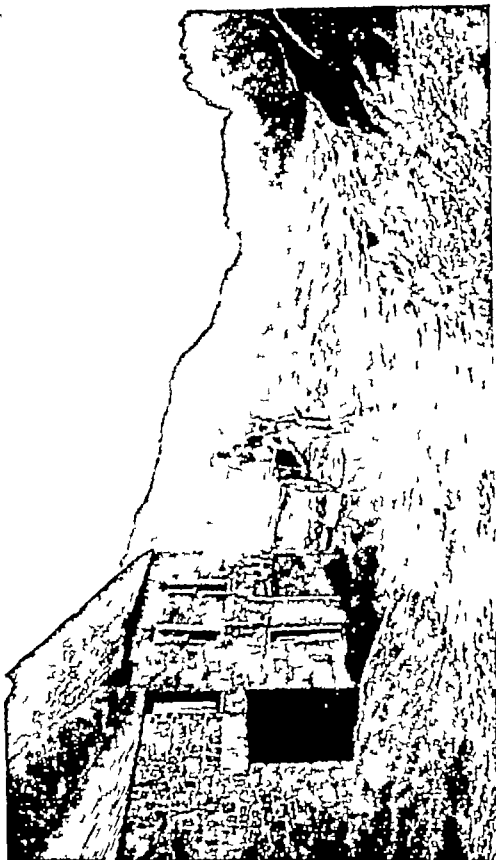
Birmingham has fine public buildings and galleries, but the dominant note in the city is industrial earnestness. There is proof of this in the scientific and mechanical sections of the truly modern university with its two thousand men and women students, and the Municipal Technical School where the students are twice that number.

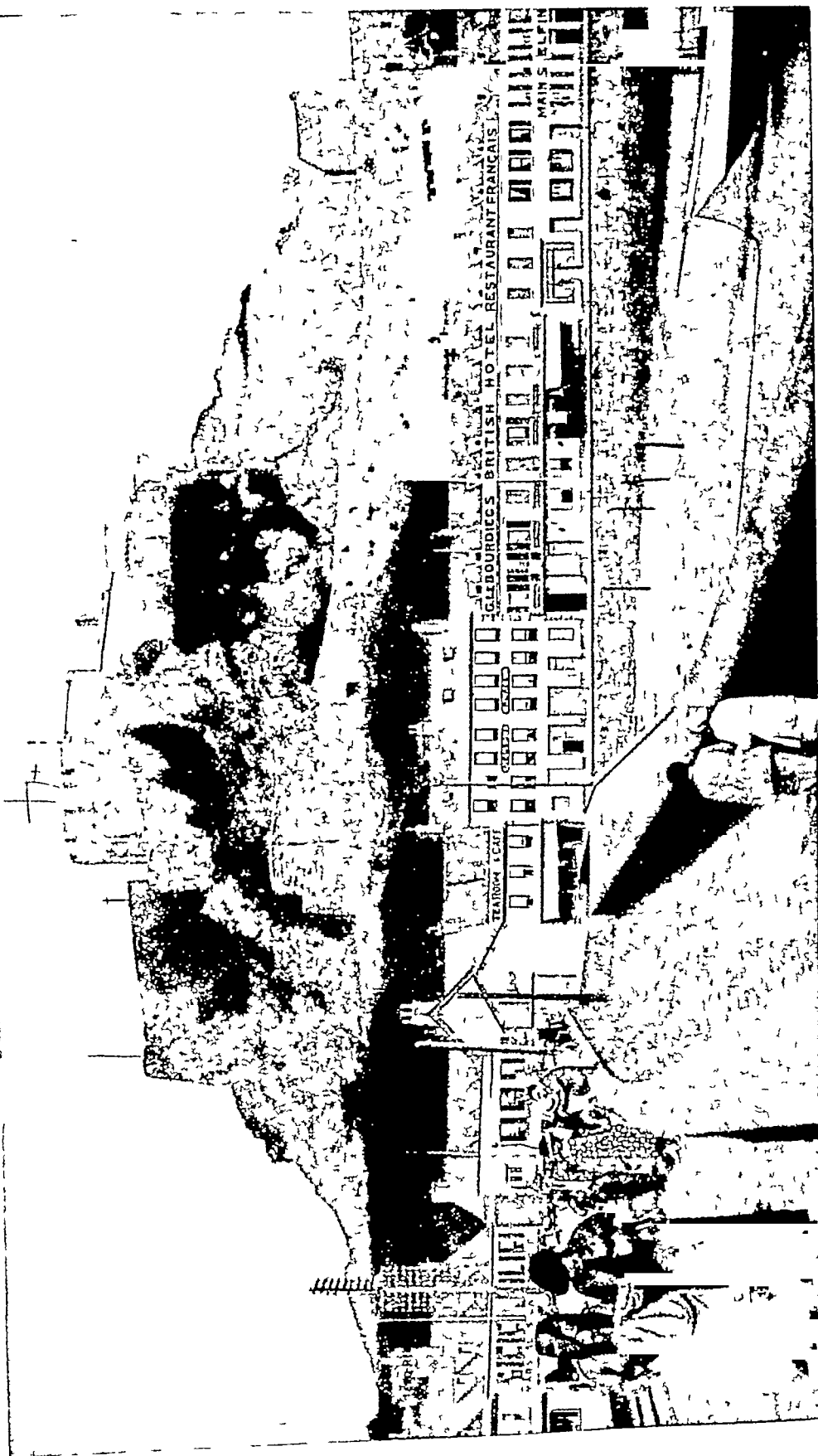
There is plenty of push about Wolverhampton which for several centuries has specialised in the manufacture of locks and keys, and is the centre of a grimy industrial area known as the Black Country—but it has long been rather over-shadowed by its much more pushing neighbour Birmingham. Then there is Coventry once chiefly



G. P. Abraham

MAGNIFICENT MOUNTAIN PROSPECT WITH DISTANT GLIMPSE OF DERWENTWATER LOOKING NORTH FROM SCAFELL PIKE
 Formerly the tops of the buttresses of Scafell Pike were known as "The Pikes," but within recent times they borrowed the name of Scafell from their formidable neighbour with which they must not be confused. Scafell Pike, the highest mountain in the Lake District, springs nearly its entire height of 3,210 feet from the valley and commands magnificent views of the surrounding highland region. Here the wilder beauties of nature are disclosed and the bold outlines of the peaks stand out rich in varied forms and tints lending an indescribable sternness and grandeur to this scenic wonderland which has inspired many brilliant pens.





PICTURESQUE PILE OF THE VENERABLE MONT ORGUEIL CASTLE ON A PRECIPITOUS CLIFF OF JERSEY ISLAND

This fine medieval fortress, Mont Orgueil Castle, is at Gorey on Jersey Island, its handsomely proportioned and ivy mantled walls presenting an extremely imposing appearance on the summit of the lofty headland. The castle, which is considered the most cherished of Jersey's medieval monuments, was begun in the early twelfth century and has interesting historical associations, the title "Mont Orgueil" was bestowed upon it by the Duke of Clarence, brother of Henry V. From the castle top the view embraces on a clear day the coast of France at its foot couches Gorey a village of considerable size, famous for its oysters.

known as the place where Lady Godiva rode through the street in what artists call the altogether—and where a rascal called Tom was truck blind because he peeped upon her when all the other people turned away so that he should not be at a loss. It is a long time now since rather lazily Coventry held a reputation for making watches and pretty millinery. In the early days of the bicycle Coventry gained distinction by producing the first safety—the sort of machine ridden now though as late as the nineties rather ridiculed by cyclists who rode on the high velocipede—a big wheel and a little man hurrying behind. The safety won popularity especially when hard tires were replaced by pneumatic and in the great boom that followed their invention Coventry looked ahead in a way which startled the oldest inhabitant. Later on there came the motor-car and once again Coventry was alive to its opportunities and made the most of them.

Leicester—*The King Lear*

There is something cheerful about Leicester despite the belief that it is the place where King Lear and his daughter lived in far-off days. It has many historic associations but since it took to history and literature making it has had various eccentricities. There is a dogmatism about its people—it was a hotbed of Christianity, a birthplace of Thomas Cooper—it gained notoriety by defying the law of compulsory vaccination—and away back in 1831 just when railways were beginning to thread the land, a Mr. Thomas Cook arranged the first railway excursion from Leicester to Loughborough and that was the beginning of Cook's tours which now entwine the earth.

Nottingham may be described as a kind of sister of Leicester for here too there is history with the addition of lace. Lace suggests daintiness—and so it is easy to suppose that life is more genial and pleasant in a lace-making than in other manufacturing towns. I remember hearing it once described as a little Paris.

Quite a number of poets lived in Nottingham—Byron, William and May Howitt, Henry Kirk White and Philip James Bailey. Though delicate machinery produces beautiful lace long ago there were terrible riots in Nottingham, when weavers smashed the looms in pinning mill because they regarded machinery as pernicious to the interest of hand workers. Perhaps a relic of this notorious behaviour is found in the land of high-spirited young revellers of today who are known as the Nottingham lads.

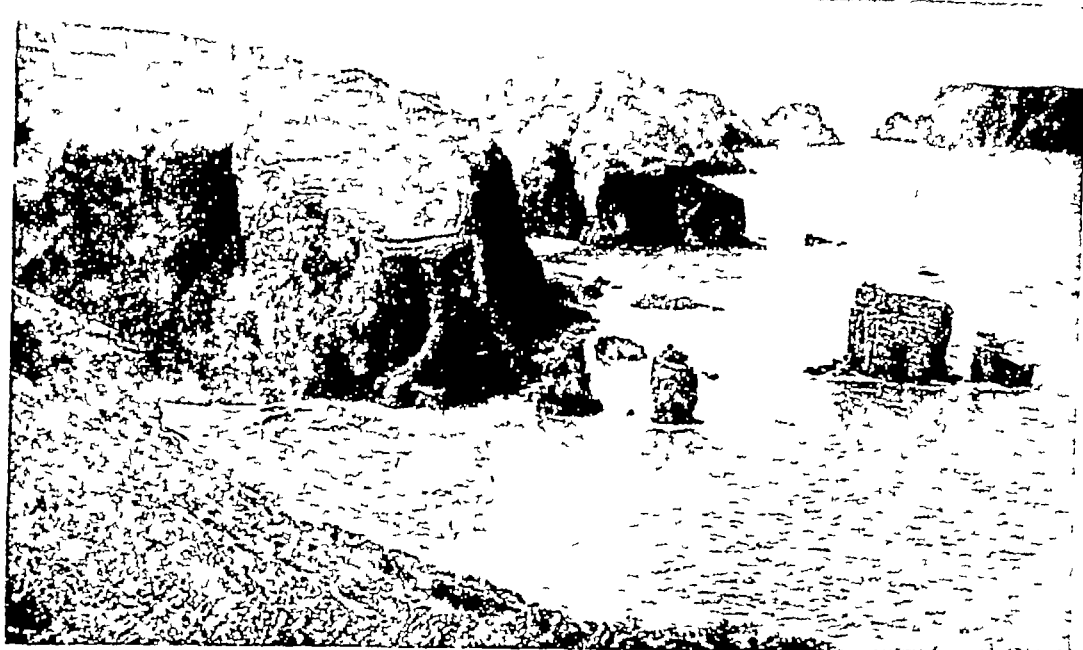
Wander of England's Workshops

If a man in the Arabian story could be seated on a magic carpet and carried whither one would like there would be much to enthral in the wonderful places of the land, the workshop of England producing a myriad necessities for man and distributing them to all lands bordering the Seven Sea. There is Darlington in the north where on the railway station platform may be seen the first railway engine George Stephenson constructed making giant strides to span mighty rivers in Africa and South America. There is Middlesbrough which has no monument of the past was nothing but field a century ago but now is widespread with a population of over a hundred thousand and is the head-quarters of the Cleveland steel district making several million tons of pig iron every year. There is "Black Preston" over in Lancashire sending forth to India and other tropical lands great quantities of cotton goods.

Reading Biscuits and Banbury Cakes

It was the birthplace of Lady Hamilton who captivated Nelson the home of the teetotal movement and it presents every Easter Monday in Avenham Park the grandest demonstration of egg-rolling imaginable.

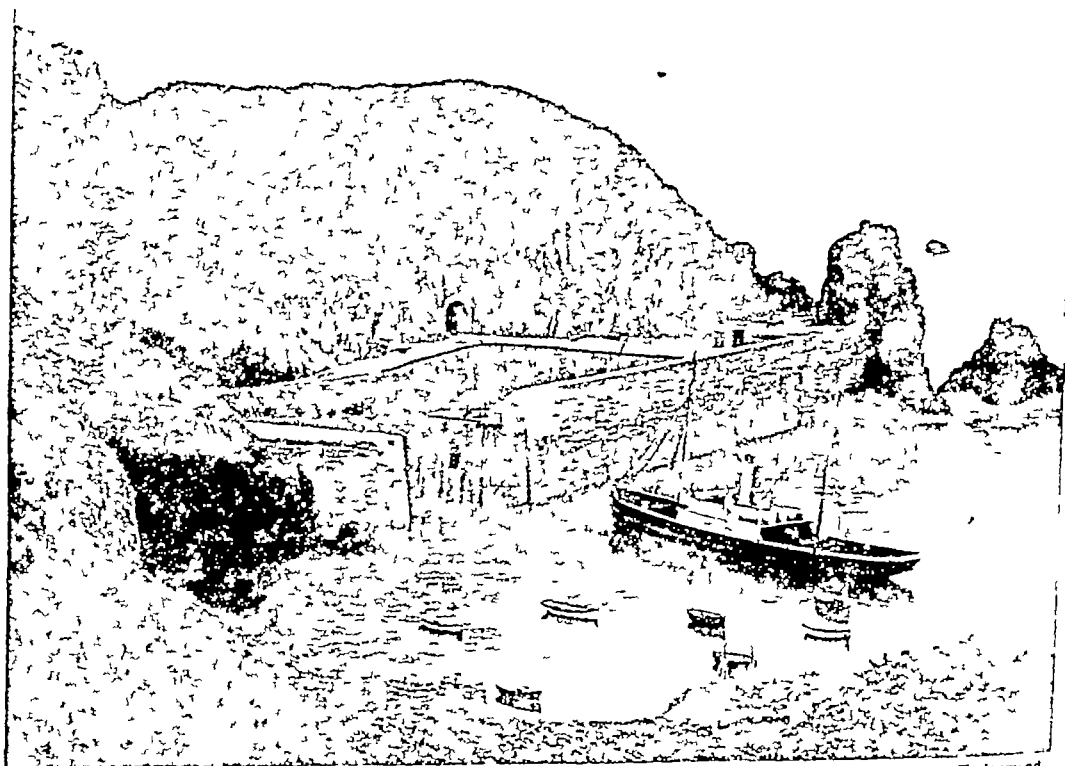
There is Doncaster which combines building railway engines with making built scotch and has one of the finest race-courses in the land. There is Reading where the biscuits come from and Banbury famous for its cakes.



RUGGED BEAUTY OF SARK'S ROCK-STUDDED COAST

F. Deville Walker

Small as Sark is, it embraces nearly every variety of scenery. Great rocks lie in detached masses around the shore, some of the most famous being those seen above, off the wild west coast, where scarcely a trace of habitation is visible. They are more than 100 feet high and are known as the Antelets including the Grand Antelet, the White Antelet and the Needle.



Underwood

MINIATURE HARBOUR OF A MINIATURE CHANNEL ISLAND

Sark is only three miles long and about 1,270 acres in area. Its small harbour lies on the east coast and is known as Creux Harbour. Here at the base of immense perpendicular cliffs two minute piers have been built—the shorter one being added in 1894 to facilitate landing—while access to the interior is gained by tunnels cut through the solid rock wall.

where the lady in the nursery rhyme rode on a white horse with rings on her fingers and bells on her toes.

Many English people are in the habit of rushing away to the Continent to visit picturesque towns. But I will not concede that within the space of our own country we have not as romantic old towns as can be found anywhere in Europe. For quiet sweetness hundreds of English villages are without peer

Canterbury Tales and think of the merry converse there was by the way. As we saunter the streets, with many old fashioned overhanging houses, the very names of the inns—like the *Fleur de Lis*, the *Falstaff* and the *Fleece*—seem to bring a soft aroma of ancient days. And we can and do have tea in angular oak timbered chambers where all the furniture and the fittings are intended to help us back in imagination to days when



SOUTHAMPTON FINELY SITUATED ON SOUTHAMPTON WATER

Southampton possesses one of the finest natural harbours in England, and has the advantage of double tide—one via the Solent and the other (two hours later) via Spithead. It has many historic associations, and there are considerable remains of the old town walls, dating from Norman times. Steamers go from here to America, France, Africa and all parts of the world.

Some of the cathedral cities are monuments of charm and old time dignity. We cannot go to Canterbury hastening there in a high-speed motor car without having the sensation of pilgrims and recalling the medieval times when thousands of devout folks slowly trudged over the Pilgrims Way, now somewhat hazy and obliterated, to visit the shrine of Thomas à Becket. Even if we have not read Chaucer's poems, we picture the journey told of in the

England was younger and more pious. You may play golf on the Kentish coast near where in the sixth century S. Augustine first landed and brought Christianity to our shores, and when on an afternoon you stroll the streets of the town where the first English cathedral was erected, you may recall that Charles Dickens often came here and you may even look round to see if there is some shy modern David Copperfield or some Uriah Heep slinking along. It



Aurodium Ltd

DOVER FROM THE WESTERN HEIGHTS WITH THE MAJESTIC SWEEP OF THE ADMIRALTY PIER

Chief of the Cinque Ports, Dover stands on the Strait of Dover, and is the chief mail packet station for the Continent, besides being a port of call for transatlantic and other liners. An important naval and military base, the town is flanked by fortified heights, while the bay is partially enclosed by massive breakwaters forming the Admiralty Pier (1,300 yards). Dover Castle, crowning the summit of the cliff to the east of the town, has a Norman keep and remains of a Saxon fortress. To the west is Shakespeare's Cliff, an embodiment of the white cliffs of Old England which gave the country its Roman name of Albion.

is good to go into cool old hostels where footsore but spiritually elevated, pilgrims used to rest although one does rather gather from Chaucer's poem that the pilgrimages of the middle centuries were jolly outings as well as journeys to seek virtue by the tomb of the murdered Archbishop Becket. Cannot we picture the pilgrims coming along Mercery Lane all eager to purchase the healing water drawn from Becket's Well?

The cathedral dominates the city. Although we know parts of it were erected at long distant periods, it is wonderful to think the original church was started in the years immediately following the Norman conquest. To-day there is the constant clatter of the boots of visitors seeing the sights. Becket's shrine and the exquisite oak screens and the stained glass windows and sculptured tombs over the remains of forgotten worthies, move to silent admiration thousands of sightseers. There is a church within the cathedral, for in the crypt is a specially walled-off part where every Sunday afternoon there is a service in French for French Protestants. So it has been for over three hundred and fifty years, a memento of the days when the Huguenots fled from their native land to seek shelter in England.

York Splendid Minster

Wandering in the cooling hours of late summer afternoon one can find, almost within the shadow of the cathedral monastic buildings, the cloisters, the old towers and the King's School with surely the oldest foundation in the country stretching right back to the seventh century. But even before the coming of Augustine when the Romans were still in Britain, there was a Christian church. St. Martin's, and portions of that place of worship built when faith was just peeping into England are part of the little edifice which still bears the name of St. Martin.

Though Canterbury takes precedence amongst cathedrals, York Minster is a more imposing pile. Whenever I am in

York I envy the delight of folk from other countries, especially from our Dominions and the United States, in "getting acquainted" with this grand old place with the stern city walls still guarding it and the big gates still to be entered. Some of the streets, with plenty of antique shops, have not changed much these three hundred years except in that they are cleaner now than they were in those days.

Guy Fawkes and Robinson Crusoe

No novelist could invent such names as Micklegate Bar and Bank Hill Clifford's Tower and the Red Tower the Abley Gate house Multangular Tower and the Merchant Adventurers' Hall—the last with its old panelling and relics recalling the time when trade guilds and not trade unions had chief voice in the commerce of the country. There have been mighty events in York: hot fighting from the time of the Romans until the time when the Germans dropped bombs from their aircraft; many a rebel in the Middle Ages ended his risky career with his head stuck on a pole above one of the bars or city gates; many gallant gentlemen during the centuries have been born here and yet the two famous individuals, now legendary and fictional, that the youth of England know best are Robinson Crusoe and Guy Fawkes.

There is much majesty in the interior style of the Minster but the thing for which it has world-wide renown is its glorious stained glass especially the graceful Five Sisters window dating back to the fourteenth century.

London Ancient Rival

Another historic cathedral city is Winchester once the capital of England when Alfred was king with civic records covering more than a thousand years, and to-day a pleasant easy-going place with certain characteristics reminiscent of some of Anthony Trollope's novels. What a contrast it is to London, and yet seven hundred years ago it ranked equal to London. The Great Hall was

partly built by William the Conqueror, and here hangs the round table reputed to be the very one where King Arthur and his knights used to sit. A London society calling itself the Knights of the Round Table makes an annual pilgrimage to Winchester. The cathedral is not so magnificent to the eye as some sister churches, but it is full of historic and ecclesiastical interest. Alarm was caused early this century by the foundations, laid over eight hundred years ago, showing signs of sinking. Those foundations, partly resting on swampy ground, had been underpinned by the monk builders with oak beams, and when some of these were removed, so that by modern engineering methods the underpinning could be made satisfactorily complete, the fine quality of the timber was surprising. Many of the recovered beams were utilised for small carvings sold to obtain funds toward making the foundations really firm.

Salisbury's Slender Spire

Another cathedral city, in the neighbouring county of Wiltshire, is Salisbury, with the most graceful spire in the country. It is the one cathedral in England that is complete in design without having changed its architecture and its style during the years of construction. It is completely symmetrical, though its slender spire, the highest in the land, was not added until a century after the main building was completed. There is a story that the scaffolding erected to build the spire around in the early fourteenth century was not removed for fear the slim lance of a tower would fall, and there the scaffolding remains to this day.

Leaning Houses at Exeter

There is something agreeably slumberous about a city like Salisbury, with its peaceful old houses, the trees and the green lawns in the close, the lovely yard within which the cathedral stands. Yet it has given great men to England. Facing Blue Boar Road is a statue to Henry Fawcett, who, though blind,

rose to a high position in politics and at one time was Postmaster-General.

Exeter has a beautiful cathedral, lacking, however, the size of some other parent churches. In this western town many of the old houses bulge inconveniently into the streets, but this adds to the quaintness. In all the changes of the centuries the Guildhall remains very much as it was when built nearly five hundred years ago. An American friend of mine could not get himself to believe this hall was standing before Christopher Columbus set forth to discover the New World. There are oak-panelled houses and some especially fine oak wainscoting to be seen in Mol's Coffee House, though no longer is coffee sold there, and in Tucker's Hall, which, like a City company of London in ancient days, was the guild house of the "tuckers, weavers, and shearmen" when England's best cloth was made in the West Country and before Yorkshire became important.

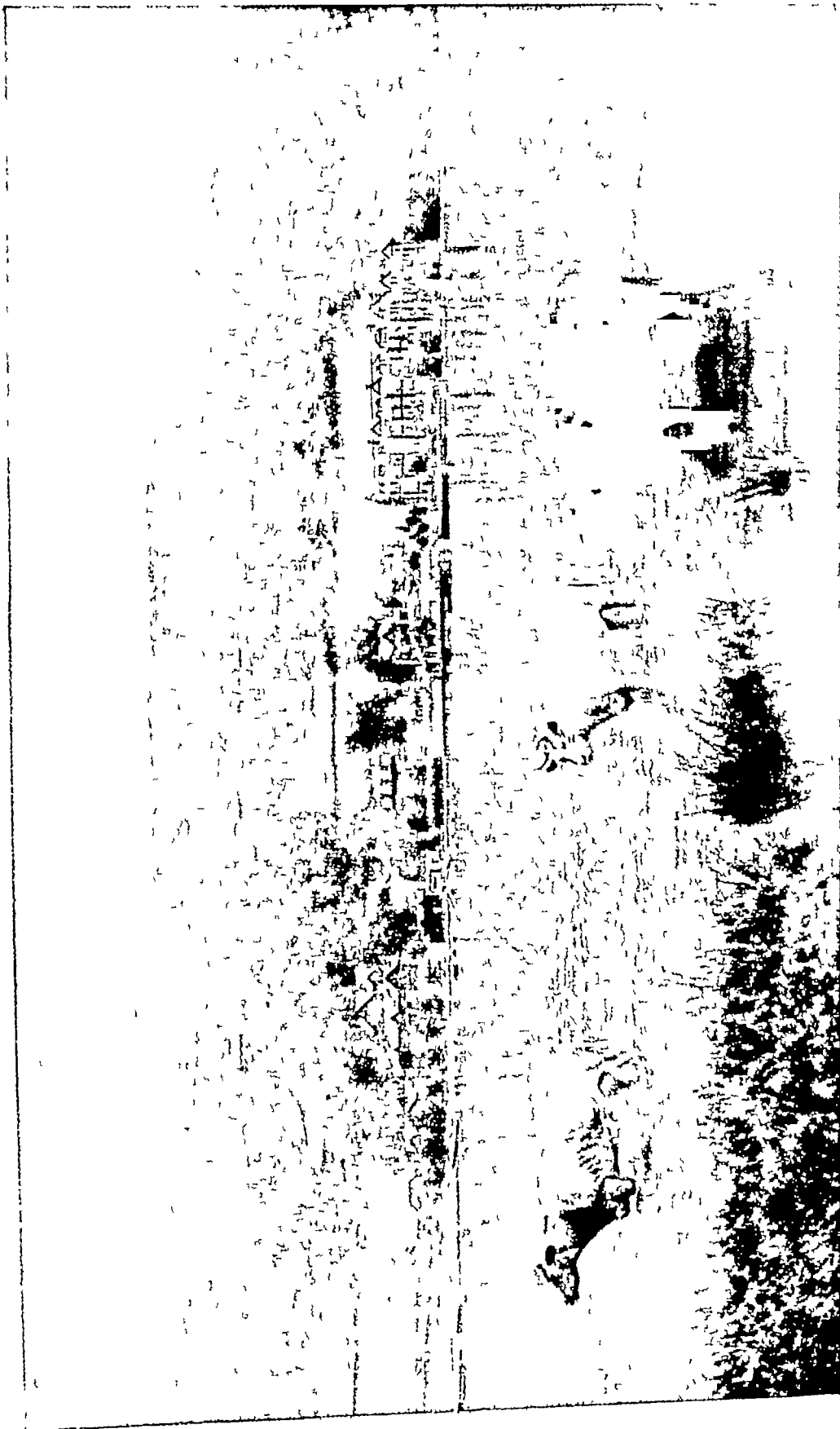
I like to think that England's cathedrals in their dignity are symbolic of the real English character, notwithstanding the dross and the tawdriness which sometimes overlay it. Who from a railway carriage has seen the old city of Durham, a jumble of red tiles and crooked streets and a swathe of smoke tumbling murkily along, but the scene dominated by the dark and lordly cathedral, without being conscious that here is the truest picture of northern industrial and religious England?

Age-old Fane of Durham

Durham city clusters a little awkwardly about the skirts of the high-poised church which has cast a blessing over these lands for more than a thousand years. By models large and small, iron at the doors of mansions, brass as tiny awakeners on the doors of bed-rooms in private houses, there is no knocker in the world so famous as the twelfth century ring on one of the stout doors of the cathedral. There is a tradition, probably with no foundation in fact, that in long ago times, the knowledge of which is now faded history, the



ENGLAND. North of Cricklade, from the English Fast
point. The Cricklade at Cricklade, immortalised by Wordsworth.



ENGLAND *Lovely scenery encompasses Windermere, largest of the English lakes. Mountainous fells close in upon its upper reach here at Waterhead, yielding to richly wooded banks along its southern waters*

G. P. Abraham



ENGLAND By common consent Dorset is the most beautiful of the English Lakes. Mountains
 endemizing in Skidz guard it on the north and crags fills and wood frame its a land tuall surface



WILL F. TAYLOR

ENGLAND Near Tintagel Castle, legendary birthplace of King
Arthur, the Rocky Valley twists down to the wild Cornish sea

1800



ENGLAND *Polperro a quaint village on the south coast of Cornwall thirteen miles from Bodmin is a centre of the pilchard fishery*



Otto Holbrook

ENGLAND Domestic architecture of the humbler sort is well exemplified in the pretty village of Thurstone in Devonshire. These cottage homes are built of warm cob thick-walled and snugly thatched.



FIGURE 1. One used not to see from London to capture the situation part of the front of the
twenty mile up from its full charm making it all at Hall of the great London and



ENGLAND Gleaning afar in the sun the fair white Seven Sisters that lie on the seaward edge of the
Sussex Downs near Seaford are familiar landmarks to every mariner faring up and down the Channel

beating of this knocker gave sanctuary to anybody fleeing from wrath or arrest. The bishops of Durham formerly ranked as princes—indeed, within their own territory they had the authority of kings but for nearly a hundred years now they have been shorn of their sovereign rank.

Another imposing and high-poised Minster is that of Lincoln, and here again just as in the case of the Durham knocker there are innumerable folk who would not recognize a picture of the ecclesiastical pile but are well acquainted with the Lincoln imp one of the carvings within the church and supposed to be a joke on the part of a monastic mason in depicting some superior who was none too popular.

The Ecclesiastical Flavour

Lincoln has had its share in the history of England holding at one time almost as important a place as London and York. When one looks at the old barge-draws in the waters of Brayford, by the hill which the Minster crowns one smiles at the fact learnt in schooldays that six centuries ago it was the fourth seaport in the realm.

Most towns and especially those of an ecclesiastical flavour seem to divide their citizens into two sections. Even in these most democratic days this distinction is well marked in Lincoln, between those who live up-hill and those who reside down-hill. Within the shadow of the Minster there are old and beautiful houses, and the people who inhabit them consider themselves somewhat apart from the thousands of citizens who are on the flat lands below and engaged chiefly in the manufacture of agricultural machinery. Were it not for its industries Lincoln would be in rather a backwater. Old customs have gone such as used to prevail at the Stuff ball—started to encourage the wearing of local stuff which everybody did at the dance—when a cord was drawn across the hall so that the townspeople would not be able to mingle with those who belonged to the county. Lincoln

to-day produces much of the finest engineering in the country and won laurels during the Great War for the quantity of ammunitions it turned out. Various people claim to have invented the "tank" which on its first appearance crawling over the battlefields brought such consternation to the enemy but there is no question that the first tanks were made at Lincoln.

Lincoln of the A. Liquory

Important though the manufactures of Lincoln are the appeal which the city makes is mainly antiquarian—with its Newport one of the two still complete arches in the country made during the Roman occupation the Stonebow a fine though in these days a cramped gate with a delightful old Guildhall above the Jews House and the House of Aaron the Jew the old Bull Ring and up the hill just as one enters Minster Yard the Exchequer Gate.

If there were space I could dwell affectionately on the old cathedral towns of England. But Lincolnshire and adjoining portions of Nottinghamshire have a peculiar interest to those concerned in the religious story of England.

Wilt-head of Nonconformity

Within a few miles of each other are the village of Scrooby and the little country town of Epworth in a part of the county called the Isle of Axholme. As the north bound trains rush between Retford and Doncaster few passengers look out of the carriage-window at a low lying farmhouse between Scrooby village and the railway line. Yet it was from that farmhouse that the Pilgrim Fathers set out, some going to Barton-on-Humber and others to Boston with its well known Stump the town from which the "hub of culture" on the other side of the Atlantic took its name. And at Epworth John Wesley was born. It is significant that it was in this corner of England the Nonconformist movement received its chief impetus.

Away in the flat regions of Cambridgeshire is Ely with its cathedral



Herbert Feltch

S ANNE'S STREET, SALISBURY, LOOKING TOWARDS THE CATHEDRAL

Standing attractively on the north bank of the Avon, 84 miles from London, Salisbury contains many interesting features. One of the notable secular buildings is the sixteenth century Joiners' Hall, the fine old timbered front of which is seen to the left, but the glory of Salisbury is its cathedral a thirteenth century classic with the loftiest spire (404 feet) in England.

and little happenings in its history since Hereward the Wake struggled valiantly against the Norman conquerors. Farther east is Norwich, which, apart from the story surrounding its cathedral of Norman days, and in a way separate from the rest of England, has characteristics of its own. Somewhat stolid compared with Englishmen elsewhere, there is a worth of character

about the people of Norfolk that impresses everybody who is able to win their confidence. Norwich seems to have a little civilization of its own, there is a local pride which is admirable. There is a variety of industries which seem to have continued for centuries, from the making of books to the rearing of canaries, making mustard and brewing beer, turning out mourning crepe and



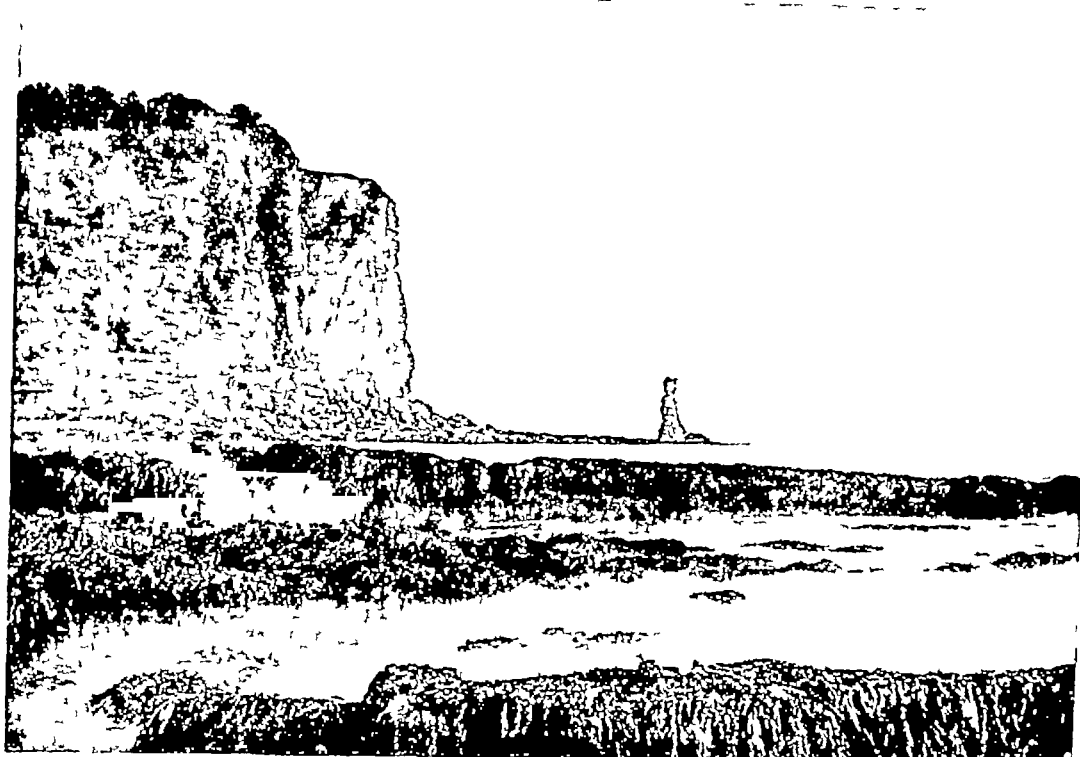
Robert Fenton

OLD TIME ARCHITECTURE IN WILTSHIRE'S CAPITAL

This old hexagonal Poultry Cross of fantastic design was erected in the fourteenth century and is one of the numerous relics of medieval times, to be seen in Salisbury. It rises on the south-east corner of the large market place, many quaint buildings are in its vicinity, including the banqueting hall built by John Halle which stands on the south side of Canal Street.

growing roses, producing a school of landscape artists, of whom Crome is the most famous, and being the birthplace of such women as Elizabeth Fry and Harriet Martineau. Besides, I think it is true that the "Norwich Mercury" which was first published in 1714 is the oldest newspaper in England which has not changed its name. We have also to remember George Borrow's association with Norwich.

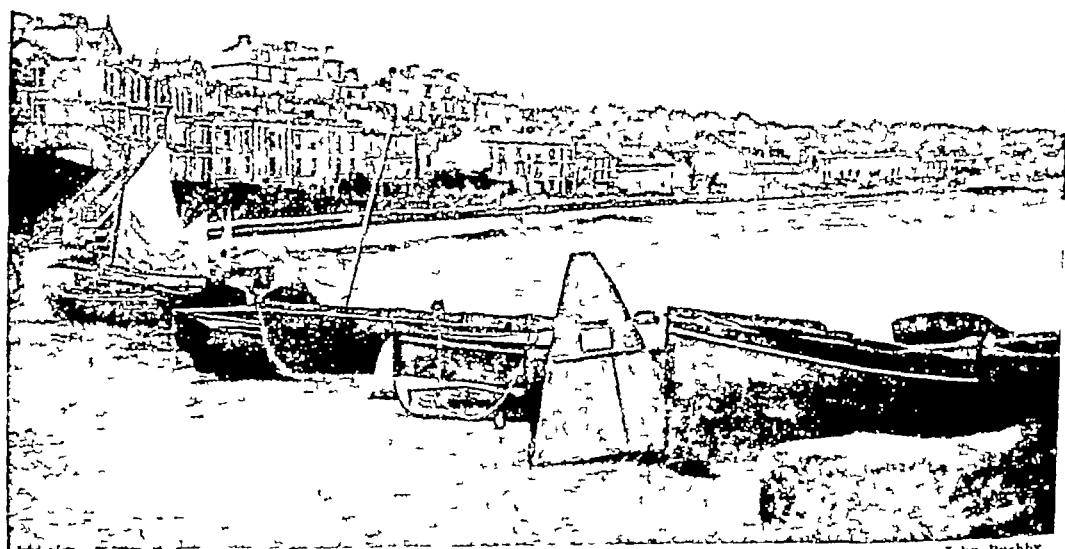
From Berwick down to Penzance the whole of England is radiant with story, whether it be in building warships on the Tyne or in making cakes at Eccles; whether it be lovely villages like Broadway in Worcestershire or the mightiest city in the world like London. The whole land is a tapestry of fascination, for each district has its attractiveness. It is excellent to become acquainted



John Burbby

DAWLISH, THE RED CLIFFS OF GLORIOUS DEVON AND A STONE SENTINEL

Sandstone cliffs, crowned with trees and luxuriant verdure, towering above the blue waters of a restless sea, make a scene of matchless beauty. The solitary rock, known as "The Priest," by some fanciful trick of tide and storm, has been eroded into the semblance of a cleric. The rocks at low tide, covered with dark green seaweed only add fresh charm to the kaleidoscopic effect.



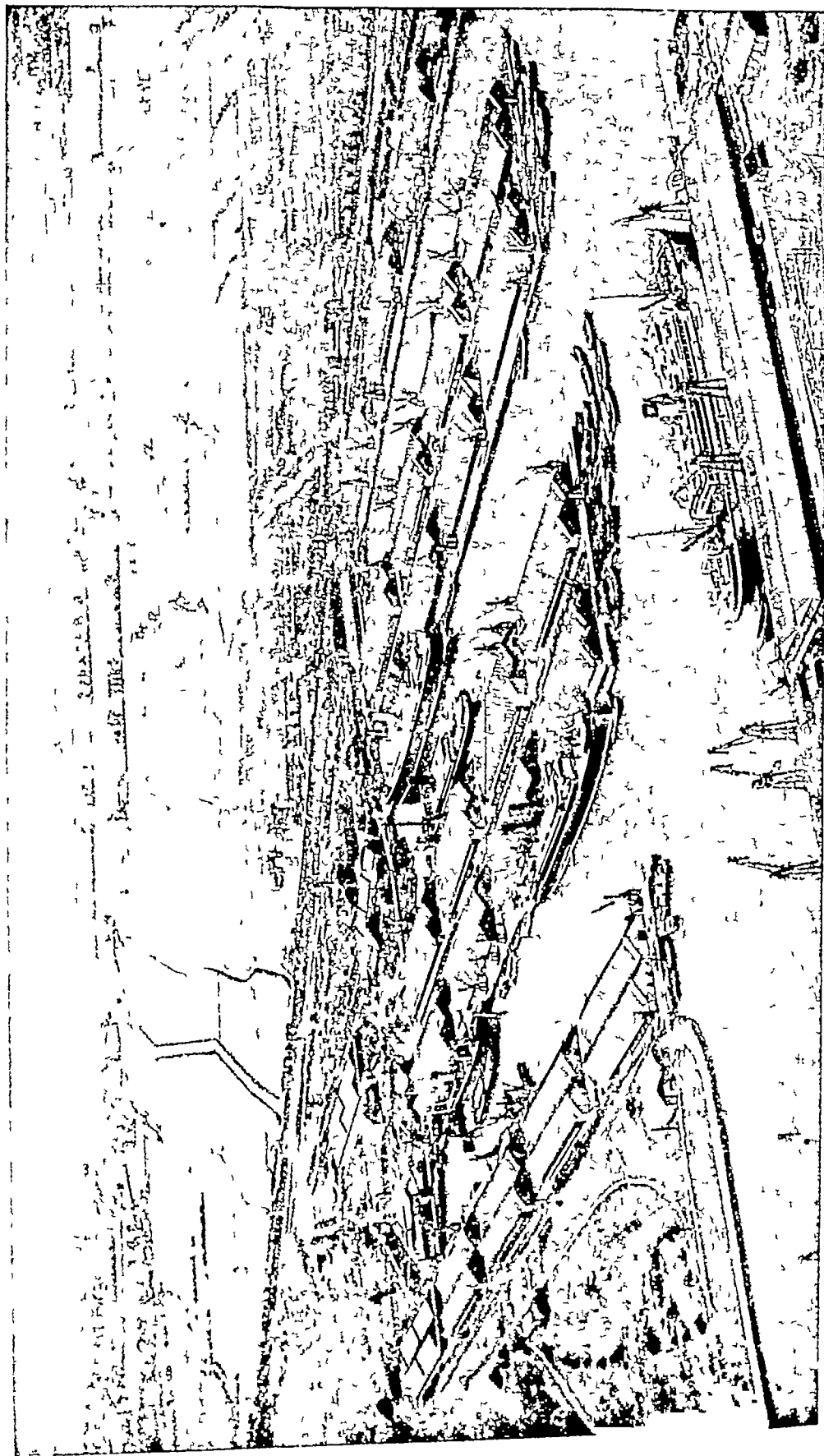
John Burbby

TOWN OF DAWLISH, DEVON, NEAR THE MOUTH OF THE EXE

Dawlish lies in a cove, sheltered by two projecting headlands, while on the north it is protected by the Haldon Range. Enjoying a warm climate in the early spring and summer, it has become increasingly popular as a watering place. Pleasure gardens line both sides of a stream running through the town, while the railway passes between the town and the sea.



DUNCTON HILL LOOKING OVER THE SUSSEX WEALED TO THE DIM SURREY HILLS
 Below in the middle distance lies Hurton Park with its tree-girt lake and the low-lying country stretching away toward Petworth. The old chalk road is one of many cut across the Downs since Roman days but is now used only by occasional farm carts. The walks across the thymus or violet sprinkled turf unpeeped from end to end abound in laws of unsurpassed beauty



TILBURY DOCKS, MIDWAY BETWEEN LONDON BRIDGE AND THE NORE, ON THE NORTH BANK OF THE THAMES
Aerodrome Ltd
The docks accommodate steamers of the P. & O., Orient, White Star, Commonwealth, Clan and other steamship lines. They are 21 miles from London on the London, Tilbury and Southend line. The main dock, with three branch docks, has a water area of ninety acres and a wall quay 2,300 feet long. The surrounding country is low lying and dreary in the extreme. Queen Elizabeth is said to have held a review here of the troops assembled to meet the threatened Spanish invasion.



Aeroflume Ltd

STAINES, WITH THE GRANITE BRIDGE OVER THE THAMES, LOOKING UP-STREAM TOWARDS RUNNYMEDE

Staines stands on the Thames, where the Colne flows into it, nineteen miles from London. For many centuries there has been a bridge here, the present one carrying the main road to Windsor being opened in 1832. Staines was a Saxon settlement, the name meaning stone, and it is supposed that the town is so called from a stone which marks the limit of the former jurisdiction of the City of London over the lower Thames. The trial of Sir Walter Raleigh, in 1603, took place in the old market house here. There are breweries and mustard mills and numerous market gardens in the neighbourhood.

There is the drowsiness of Dorchester where lives Thomas Hardy who has immortalised the whole of the country side in his Wessex novels, and where to wander beneath the trees along The Walks brings peace and content. There is Taunton, the county town of Somerset a great country for cider and where the "families" still have a little of the influence of old feudal days.

And not far away are two dear old towns, Glastonbury and Wells. Glastonbury is wrapped with romance. He is lacking in imagination who can visit the old Abbey without letting his mind slip back to the stories told by Mallory. Is there not a tradition that Joseph of Arimathea brought the chalice of the Last Supper to the happy spot beneath the hill, that St. Dunstan was born here and St. Patrick buried here and, with poetry infusing legend that before the altar of the old church—whose abbot was once the mightiest abbot in England—King Arthur of the Round Table and Guinevere rest?

Where *M. Pickwick* Dined

Within easy travelling distance of one another are Gloucester and Tewkesbury, Hereford and Worcester, Ludlow and Shrewsbury. At Gloucester when you have explored the cathedral where Edward II lay after being murdered at Berkeley you may visit the New Inn—built five hundred years ago—and remember the story that it was here that Lady Jane Grey was proclaimed queen. Over at Tewkesbury you can seek refreshment at the Hop Pole, where *Pickwick* dined with Bob Sawyer and Ben Allen or idle part of a holiday by re-reading Mrs Craik's *John Halifax, Gentleman* (Nortonbury is Tewkesbury) or try to find out what Shakespeare meant when in "Henry IV" he refers to Tewkesbury mustard.

Hereford once a guardian town, with strong towers against the Welsh, has many quaint houses. Worcester which used to be the chief city in the land for the production of cloth, now produces the well-known sauce called by its name as

well as gloves and porcelain ware and it is distinguished in history by standing stoutly by the Charles in the days of the Civil War. It takes pride in being always true to the king whatever happens. That is why it carries the motto "*Civitas in bello in pace fidelis*."

Ludlow has a number of Tudor and Jacobean half timbered houses. And though in ruins what a fine old castle there is, once the fortress of the Lord's President of the Marches, always with an eye on the Welsh border.

Shrewsbury Girt by the Severn

Shrewsbury which I have found it a joy to visit positively hugged in embrace by the Severn, with inhabitants showing a traditional fondness for cakes and ale has some funny old houses in places called Dogpole and Wyle Cop.

Friends from the Dominions and the United States are often "intrigued" by the delicious flavour of some of the English place names—a thing which some of our poets have noticed, names which were not invented but apparently grew out of the soil. An American woman friend of mine exclaimed "What pretty names, when, in talking about a motor trip I was arranging I spoke of Chalfont St Giles and Holmbury St Mary. Is there not something beautiful in just reciting the names?"

The Saviour of M Blow N mee

Such places as Chevy Chase, Wyaston Leas, the Wolds, Widecombe-in-the-Moor, Walton-on-the-Naze, Symonds Yat, Tarn Howe, Tavy Cleave, Thorpe Cloud, Ugglebarnby, Southern Delabere, Sutton Courtenay, Ashby Magna, Bere Regis, Burnham-on-Crouch, Cannock Chase, Cherry Hinton, Combe Florey, Drayton Beauchamp, Hinton Admiral, Luton Hoo, Mavis Enderby, Runcynmede—oh, many hundreds of place names that seem to have come up like flowers, instead of as in newer countries, being just a label stuck on a town!

We have many towns, besides those I have mentioned that make no pretence to engage in the industries which have



PLEASURE CRAFT ON A FAIR REACH OF THE THAMES, ENGLAND'S GREATEST WATERWAY, AT RICHMOND BRIDGE

At one London the Thames England's largest and most important river, has but a small commercial traffic and is an ideal boating river. Perhaps no section of it has been painted and photographed more frequently than that at Richmond. At this point the stream is mainly a pleasure ground for since the lock, the last and lowest on the Thames constructed in 1891 has controlled the swift current and underwired of the waters the reach of the river between Richmond and Kingston has become extremely popular and here a multitude of punts and canoes, small rowing boats and launches are seen during the summer months

Underwood

made Llandudno what it is, but are a kind of garden where rest and pleasure can be obtained after the toil of the day. One town which merits this description is the nearest to London, Tunbridge Wells. For over three hundred years it has been the resort of persons of London who desire to take the waters and enjoy the Kentish scenery. How this idea grew it is difficult to say, but there is a belief that the first appreciation of Tunbridge Wells was by rather glibly talking of

resort with a mineral water, specially stimulating to the liver which may be explained why the town is so popular with retired Anglo-Indian, though it does not quite explain why it is so famous for its scholastic institution. Perhaps it is more to be attributed to (two) admirable colleges, Cheltenham College and one of the best public schools in the country, while the Ladies College certainly provides a charming finish to many of the ladies in women.



MIDHURST, SUSSEX, WITH ITS QUIANT HALF-TIMBERED HOUSES

Midhurst, farming market town, is surrounded by some of the most beautiful scenery in Sussex. Near this town are the ruins of Compton Castle, a Tudor mansion, destroyed by fire in 1593, situated in Compton Park. Besides the curious half-timbered houses, there is an seventeenth century grammar school and the Spread Eagle Inn, part of which dates back to the fifteenth century.

there are places called Mount Zion, Mount Ephraim and Calvary, though the latter is now generally spelt Calverly. One sees Tunbridge Wells at its best in leafy summer time, when the town is full of sedately disposed visitors moving along the promenade called the Tunnel—a colonnade on one side and trees on the other which has been a favourite walk for nearly three centuries. There is Cheltenham, which is a nice health

Another place of happy retreat is Malvern—which also has a splendid college for boys—which includes Great Malvern and Little Malvern, Malvern Wells, West Malvern, North Malvern, and also one or two others. There are cosy hotels and private houses which suggest a comfortable income of a couple of thousand pound a year and easy walks about the skirts of the Malvern Hills, though a climb to the

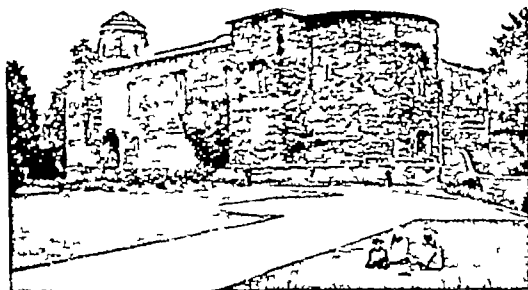


HOLMBURY HILL, ONE OF THE DELIGHTFUL PLACES IN A COUNTRY RICH IN SCENIC BEAUTY
 Holmbury Hill, a few miles south west of Dorking, is a landmark of the North Downs. From its summit there is a view over typical Surrey and Sussex scenery while its history links it up with the distant past. Its bracken and heather covered slopes make it singularly attractive to lovers of the countryside, ramparts and covering an area of nearly nine acres. Over the hill are the remains of a Roman camp, which forms an irregular oblong, surrounded by two fosses and Here it is said the Danes were defeated by Ethelwolf and Athelstan in 851

Worcestershire Beacon rather tests the "wind" of the middle-aged. Yet the tug up is worth it for one learns that the eye ranges over fifteen counties. You can certainly see the cathedrals of Worcester, Hereford and Gloucester and more than three abbeys.

It is understandable that places which have gained fame for their beauty and health-providing qualities should be regarded as unsuitable for school. Though now virtually a London suburb, Harrow-on-the-Hill with its school of

whose singing was cut off in the Great War. Rugby, however, has fame not only because of the school but because it was there that the football game bearing its name came into existence. On Doctor's Wall there is a tablet recording the exploit of William Webb Ellis who with a fine disregard for the Rules of Football played in his time first took the ball in his arms and ran with it, thus originating the distinctive feature of the Rugby Game. A.D. 1823. French seaside resort, an attractive



MASSIVE NORMAN CASTLE AT OLD COLCHESTER IN ESSEX

Colchester possesses a wealth of interesting historical treasures. The city wall may be considered the most perfect sample of Roman urban defences extant in England, while the keep of the Norman castle with walls twelve feet and more in thickness is the largest in the country. Part of the castle is museum and contains a fine collection of late Celtic and Roman antiquities.

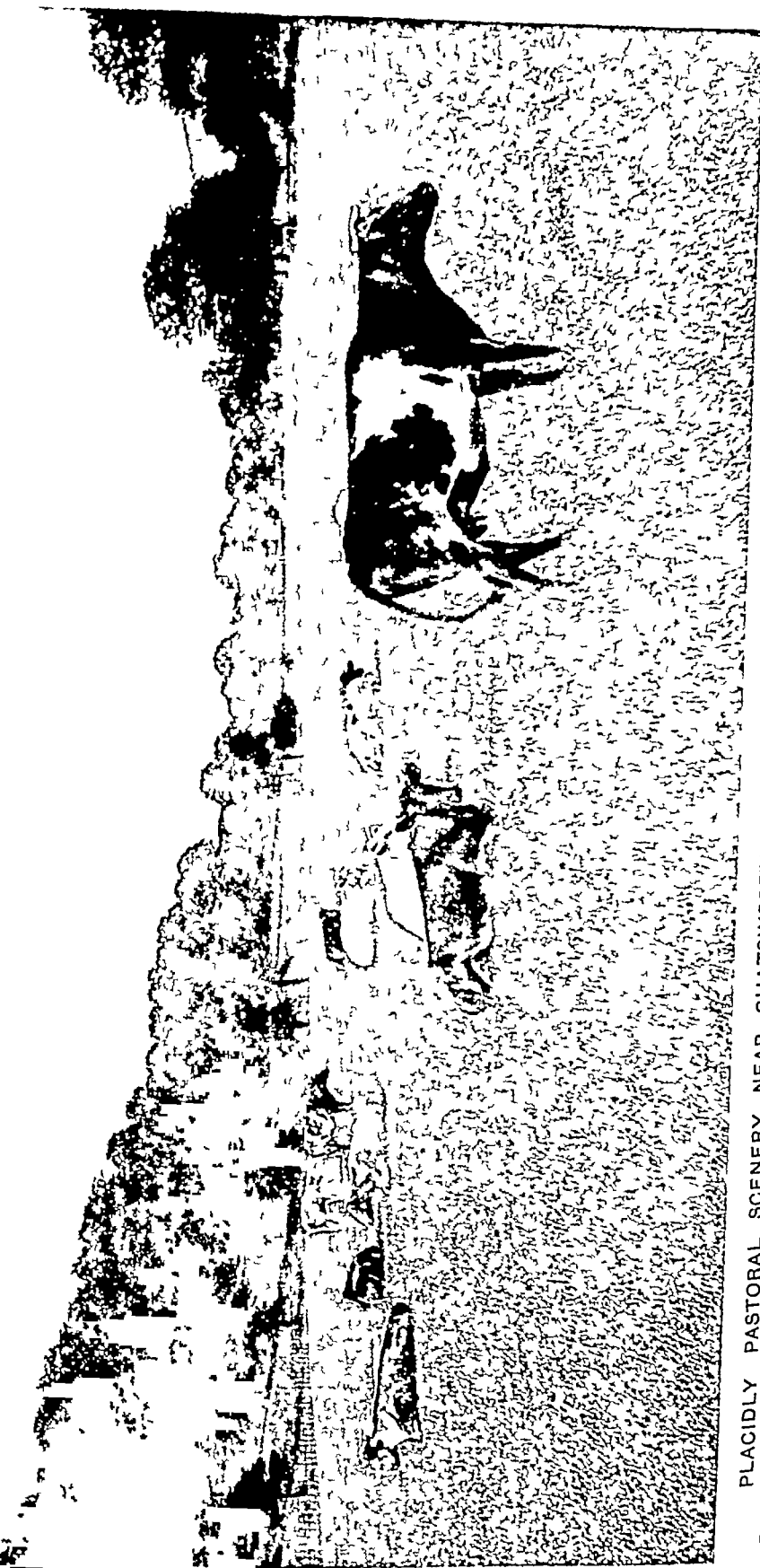
fine traditions, which has had the training in youth of many men who have contributed to the lustre of their country, is particularly fortunate in its breezy, breeching situation.

Notable too is Rugby, where in 1567 was founded the famous school which has had famous headmasters like Dr. Thomas Arnold—father of Matthew Arnold—and which has counted amongst its pupils Dean Stanley, Walter Savage Landor, Thomas Hughes, who wrote

Tom Brown's School-days, C. L. Dodgson the creator of Alice in Wonderland, and Rupert Brooke the poet

places, but knowing many lands I am quite positive taking all things into consideration there are no seaside places that surpass those of England.

Brighton is the best known. Dr. Brighton, it is sometimes called, and it is particularly beloved of Londoners. Indeed, it is London by the Sea, for by express train it is only an hour away. Hundreds of business men live at Brighton and daily make the journey to London. To Londoners the escape to Brighton for a week-end is always an invigorating experience. Immediately west of Brighton are resorts that are



PLACIDLY PASTORAL SCENERY NEAR CHATSWORTH PARK, IN WHICH STANDS STATELY CHATSWORTH HOUSE
 Derbyshire is rightly famed for the contrasts in scenic beauty that it affords. From the peaceful meadows it ranges to the wildly romantic, and from the luxuriantly wooded to the bleak and rocky moorland. The narrow and often precipitous valleys of the Peak, with the white limestone rocks, relieved with the dark green of yews and clinging ivy, are strikingly beautiful. Chatsworth House, the Derbyshire seat of the Duke of Devonshire, is a vast quadrangular structure in the Ionic style. It is surrounded by a large deer park of singular attractiveness watered by the tranquil Derwent.

John Ruskin



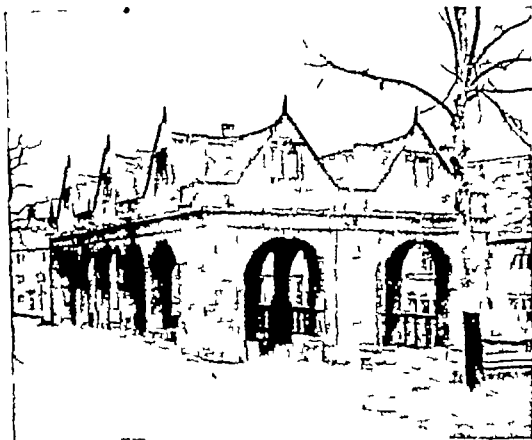
Undercroft

WARWICK CASTLES HISTORIC RUINS IN WARWICKSHIRE SHOWING CAESAR'S TOWER ON THE RIGHT

since it stands almost in the centre of England and Clinton a courier of Henry I. Queen Elizabeth was its present ruinous state is attributed to Cromwell's

amusements is inexhaustible. There seems to be something special about "Margate air." I have sometimes wondered why the enterprising local authorities don't provide for a winter season as well.

England and the Continent. Then there is Folkestone with its splendid Lea. Hatings of schoolbook memories rapidly regaining favour after being rather eclipsed for some years like its neighbour St Leonards Beach which



Robert F. Cox

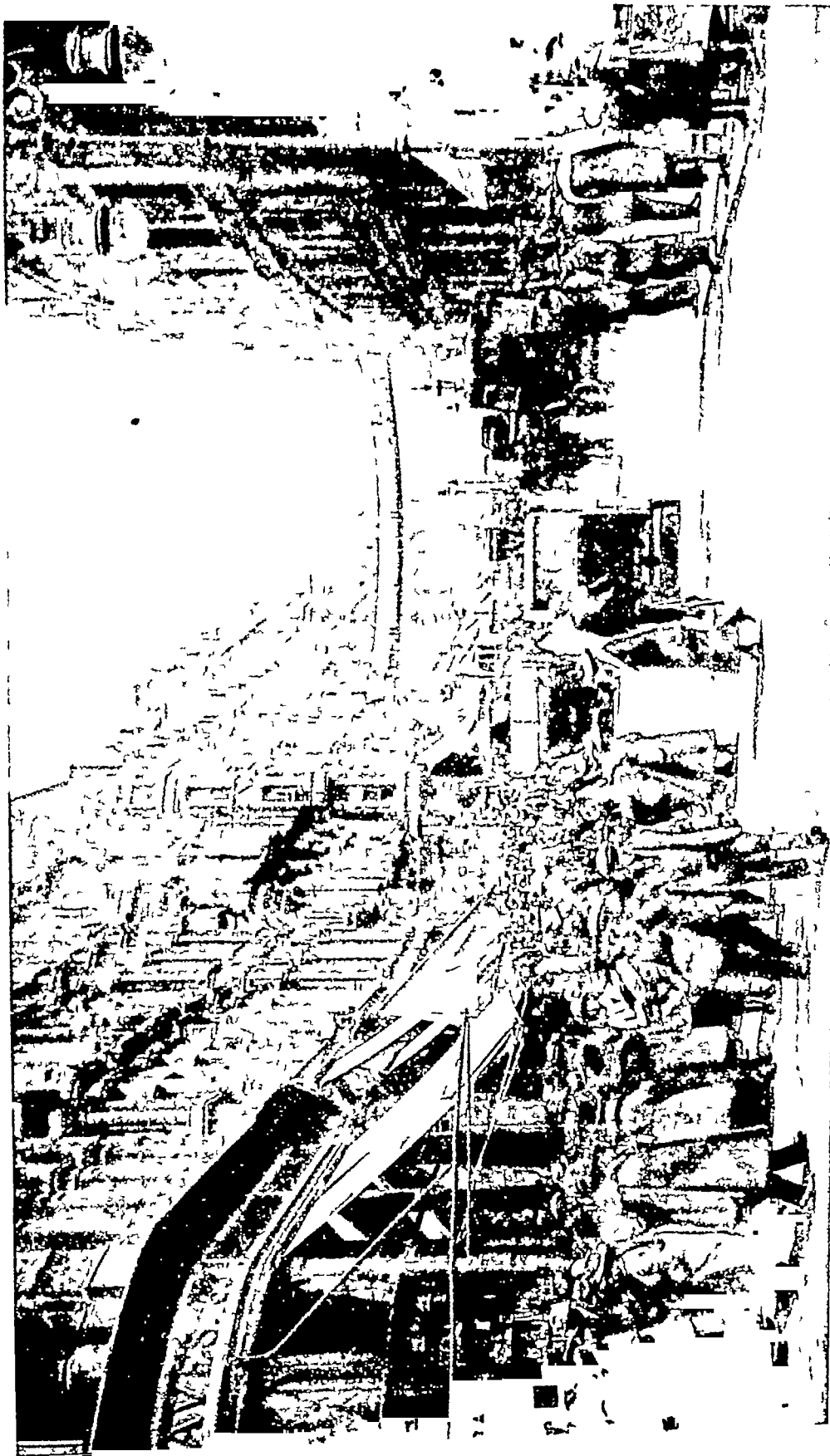
QUAINT MARKET HOUSE AT CHIPPING CAMPDEN IN THE COTSWOLDS
Chipping Campden, Gloucestershire, five miles from Fossebury, is a delightful site, set in the north of the Cotswold hills. A ruined tower house of the sixteenth century, some almshouses complete, together with the church and market house, bear mute testimony to the former importance of the town. The church of St. James contains some fine fifteenth century brasses.

Bearing round the exhilarating North Foreland there is huddled happy little Broadstairs, with memories of Charles Dickens and Ramsgate appreciated by those who want air a little less exhilarating than that of Margate. Deal is an old time fishing town and some of the Deal boatmen seem to have stepped out of the pages of one of W. W. Jacobs' novels. Dover is not only a fortress and the nearest port to France with constant ferrying between the two countries, but is loved by many people because of the unending interest provided by the constant stream of travellers between

is new and good and, before rounding Beachy Head Eastbourne which is the seaside resort with style with much refinement and high-class entertainment much liked by ladies who have frocks to be changed several times a day since there will be other women to appreciate their merits.

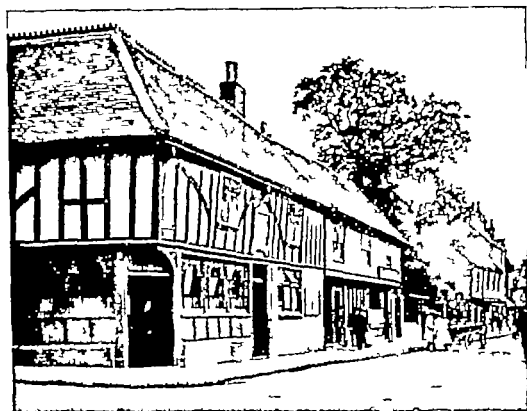
We fly along the coast past the Isle of Wight the "Garden of England," to Bournemouth, a comparatively new resort famous for its gardens its pine woods and its concerts.

Many people like Weymouth, on the edge of Dorset and looking upon the



CORPORATION STREET, BIRMINGHAM, ONCE A SLUM, NOW A FINE STREET OF SHOPS AND PUBLIC BUILDINGS
Birmingham, the largest provincial city of England, and the third largest of the United Kingdom, is situated in the West Midlands. It owes its industrial prosperity to the abundant supplies of coal, iron, wood and sand in the vicinity. Almost anything made of brass or other metal, from a pen nib to the largest steam engine, is produced here besides jewelry, rubber goods, chemicals and glass. The city's art treasures comprise old Venetian glass, Indian textiles, tapestries by Burne Jones, Italian sculpture and metal work, and a large and representative exhibition of paintings.

H. J. Whitlock & Sons Ltd



Donald M. Irish

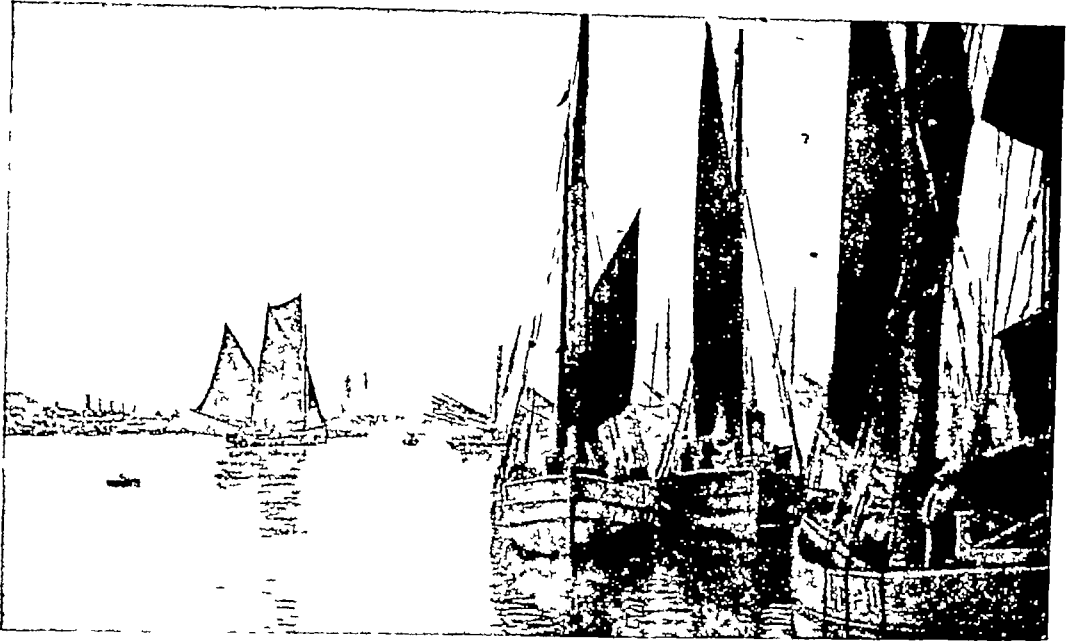
ONE OF THE FINE OLD TIMBERED HOUSES IN FORE STREET IPSWICH
Ipswich, Suffolk, stands on the Gipping, where it becomes the Ouse. It is a considerable port
through a tunnel from the sea, besides being a centre for engineering, docks, Agricultural Implements,
railway works, clothing, boots and shoes are made here. While there is also a tobacco factory. In
the older portion of the town there are still a few sixteenth century houses.

Isle of Portland, because it makes few pretensions to catch the slipshod holiday maker but appeals more to what may be described as people of substance. There is a nice air of comfort and stolidity about the people taking their morning stroll along the front. George III. was particularly fond of Weymouth and frequently stayed there at Gloucester House now made into an hotel. There are many yachts in the bay and a regatta usually held immediately after Cowes week attracts many finely rigged racing yachts. With Portland Bill—famous for its quarries and its convict prison now a Borstal Institution—acting as a shield from south-westerly gales, there has been constructed within its lee an enormous artificial harbour where practically the whole of the Home Fleet may be seen lying at times. And it is always a fine experience frequently allowed, for visitors to Weymouth to visit and explore great battleships.

Another popular resort on the south coast is Torquay with a climate which has been likened to that of Italy where tropical plants grow in the open and where indeed the temperature is so mild that I have seen roses in full bloom at Christmas-time.

The last and most westerly of holiday places on the south coast is Penzance with the artistic colony of Newlyn only a few miles away. Immediately opposite is St. Michael's Mount, very like Mont St. Michel over on the French coast, a mass of granite, dominated by a castle belonging to Lord St. Levan and having communication with the mainland only for an hour or two each day when the tide is low.

On the north coast of Cornwall is Newquay with its big hotels and excellent golf. Tintagel with its stories of King Arthur and his knights, and so by way of much photographed Clovelly up to the picturesque watering-place of



John Bushby

RED-SAILED SMACKS OF THE FISHING FLEET IN LOWESTOFT HARBOUR
 Lowestoft stands on the Suffolk coast about 16 miles by rail from Yarmouth and just south of Lowestoft Ness, the most easterly point of England. Primarily a fishing centre, it has developed into a popular seaside resort. The colourful ketch-rigged smacks are being displaced by the swifter steam trawlers. On the right of the photograph is one of the several fish markets.

Ilfracombe, which really has grand scenery, and to dear little villages like Lynton and Lynmouth.

I know that many people express horror when great popular places, which appeal to the "mob," are mentioned. Personally, I like them, in moderation, because seeing the "mob" thoroughly enjoying itself is a study I never miss. That is why I like Blackpool, even on an August Bank Holiday. Blackpool has none of the scenic attractions to be found at the other places I have mentioned, and yet, not even excepting Margate, it is the most popular seaside place in the country. It is not because the bathing is particularly good. But it is one of the nearest seaside places to the millions of operatives in industrial Lancashire and Yorkshire.

The amusements provided are not those which would appeal to the patrons of Eastbourne or Bournemouth, but there is a tremendous mass of them, and even Coney Island, in America, cannot surpass them in variety.

On the other side of England are several watering-places which have their particular call. Whitby, a

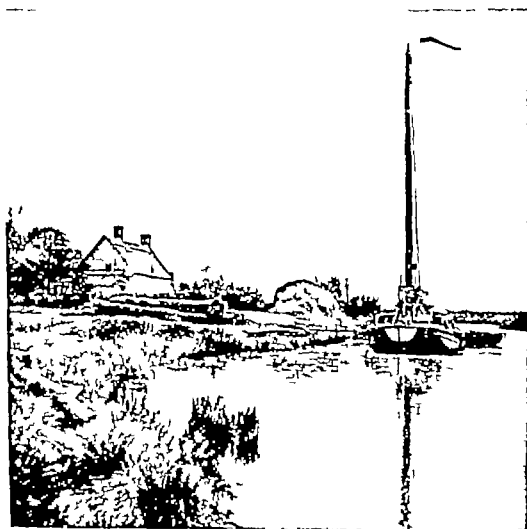
fishing town of jumbled houses overlooked by the ruins of Whitby Abbey, and the place where the ships were built which carried Captain Cook when he first circumnavigated the earth, Scarborough, with its Henry II castle, its shops, its cliffs and fine houses and wealth of gardens, Filey, a sort of paradise for Yorkshire families and, near the Bempton cliffs, a favourite breeding-place of sea birds, Bridlington, excellently situated, which could be made a more attractive place than it is.

On the Norfolk coast there is Cromer, looking out upon the North Sea, as bracing a spot as you will find in the kingdom, much beloved by golfers, and where the abundance of poppies in the cornfields inspired Clement Scott to write "The Garden of Sleep," a poem once popular as a drawing-room song. Then Yarmouth. The very thought of Yarmouth brings the ozone into one's nostrils, maybe because of the association of breakfast bloaters with the place once a famous seaport and now chiefly a holiday resort. And what lover of Dickens can visit Yarmouth without re-reading "David Copperfield" and

rejoicing to renew acquaintance with the Peggotty family? From Yarmouth right down to the Thames there is a string of holiday places—Lowestoft and Southwold Felixstowe and Clacton and then Southend-on-Sea which "sleeps" more men engaged during the day in London than any town that can be named, with a nice and pretty neighbour Westcliff.

But having zigzagged the country and toured the three coasts, we are till far from exhausting the places worthy of being named among the towns of England. There are many towns

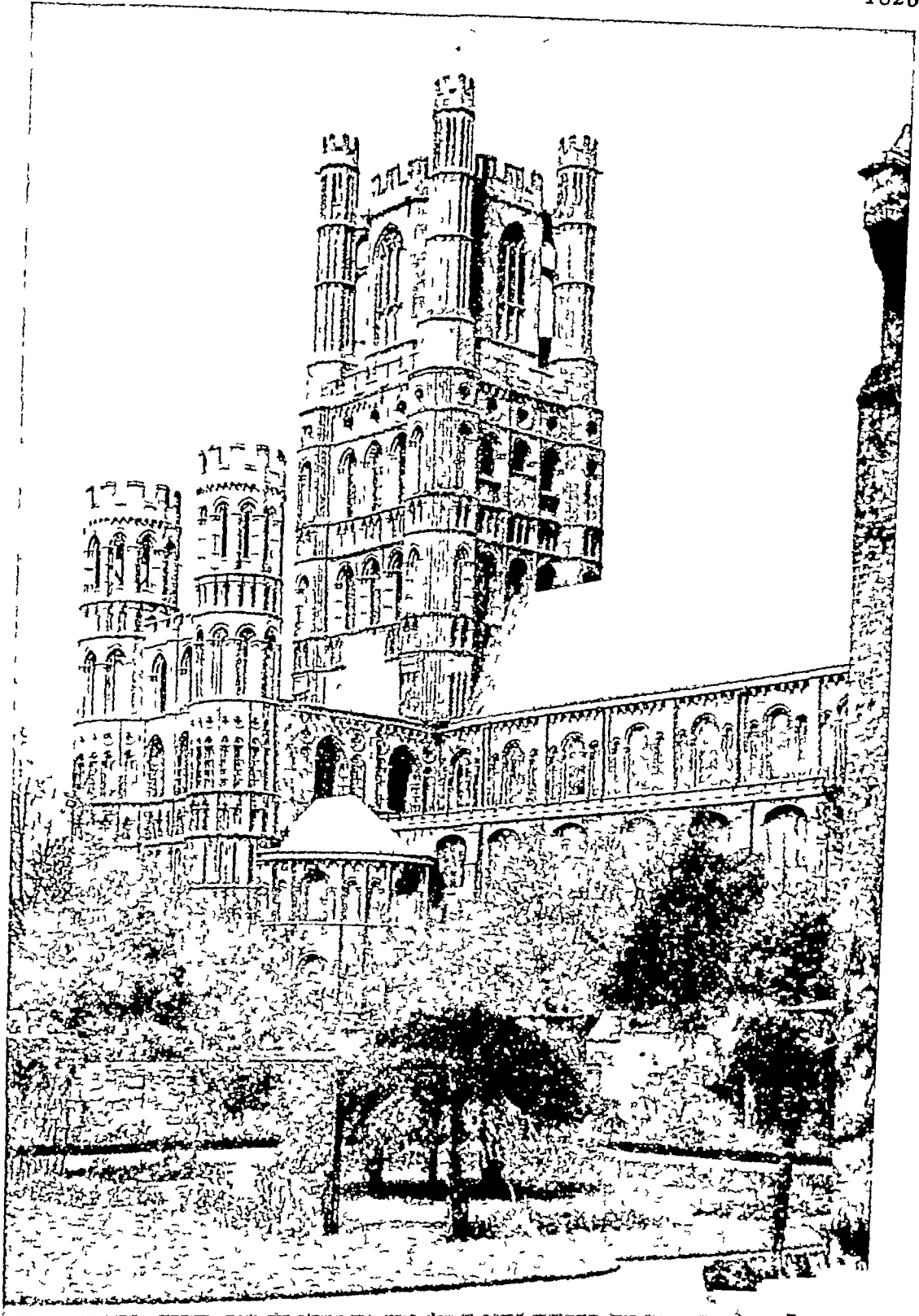
which must not be overlooked. Certainly I should not forget Carlisle for as a Scot I am interested in a tradition of my family that in the times when there was *bonnie fechtin* on the Border two of my forebears were hanged at Carlisle for cattle lifting which is to be distinguished, I understand, from cattle thieving. And there is Colchester of much renown in history but mainly proud that here the first English oysters were eaten probably by some gourmet of a Roman. The event is celebrated by an annual Oyster Feast, when the visitors of note, whilst saying the usual nice things, have



INSTEAD ON THE ANT IN THE HEART OF THE NORFOLK BROADS

John Smith

Berton Broad is drained by the Ant which flows into the Burn. The Broad is shallow meres linked up by placid, sluggish streams, having their low banks covered with profusion of herbant reeds and water plant. Most of them abound in fish and harbor innumerable water fowl and are frequented by boating parties in wharves with huge black sails as depicted in the photograph.



Donald McLeish

GRANDEUR OF THE CASTELLATED WEST TOWER OF ELY CATHEDRAL

Situated in the Isle of Ely on the left bank of the Ouse, Ely Cathedral is one of the longest churches in England. Abbot Simeon began its construction in 1083, and the architecture embraces every style from Early Norman to Late Perpendicular. After the accession of William the Conqueror the isle became the last refuge of the Saxons under Hereward the Wake.



WILL F. TAYLOR

LAND'S END, GRAND ROCKY PROMONTORY OF GRANITE FORMATION

Some 293 miles from London lies the western extremity of England, Land's End—a granite headland roofed by turf, its termination crumbled into great rock fragments, among which the white foam churns incessantly. Over a mile from this end of Cornwall the tall shaft of the Longships Lighthouse is seen, while on a clear day the Scilly Isles, 25 miles away, rest like light clouds on the western horizon.

no doubt a memento of the time when the Norsemen had possession of it. Two English families used to have lordship over the island—the Earls of Salisbury, who were crowned Kings of Man, and the Stanleys, Earls of Derby, who were content with being Lords of Man, because, as the fourth Earl of Derby said, he would rather be a great lord than a little king.

Though under the British Crown, the island is not subject to the laws of the British Parliament, having its own executive authority, the Court of Tynwald and its House of Keys, said to be older than the House of Commons as a legislative body. Douglas is a joyous town, with many amusements, and with probably the biggest dance halls in the world. Though a holiday place to tens of thousands of North of England folk, there is something severe in the character of the true Manxman, about whom Hall

Caine has written much in his novels. There is a different, gentler note about the Isle of Wight, which is reckoned part of the county of Hampshire. Queen Victoria loved it, and for years resided at Osborne House, once a naval school. The adjoining little town of Cowes once a year brings together all England's yachtsmen, and Cowes Week, with racing in the Solent, is one of the aristocratic events of the "season."

The principal holiday place is Ventnor, near which is the village of Bonchurch, where there is the loveliest little church, flower embowered, I have ever seen in my life. And there is Carisbrooke Castle, where the hapless Charles I. spent 14 months as prisoner. Whether you are content with Ventnor, or go to Sandown or Shanklin or Freshwater, associated with Tennyson, who lived at Farringdon and who wrote "Crossing the Bar" when he was crossing the

Silent, or seek fulsome in many of the little towns, the life of Wiltshire always graces, and vivifies it a little more in an elegant house.

The Channel Islands—Jersey, Guernsey, Alderney and Sark—are nearer the coast of France than England. The usual language is French though the names are English. England. They are self-governing. Jersey is the only one having a rate contribution to the Imperial Exchequer of the British Parliament. As the local income tax is insignificant, not a few English people avail themselves to their own security through the privacy of the income tax collector by taking up their permanent residence in these Channel Islands. The man or woman who would mix boldly making ameliorated beautiful and rugged scenery with brilliant investigation into the lives of these islanders with Norman and Breton blood who have been in the British Crown

for nearly or half a hundred years and who still retain much of the old feudal system in practice, the Channel Islands have interest without end.

Not many folk go to the Scilly Islands which are like a handful of English thrown toward the Atlantic. They are all that remains of the fabled land of Ivalley which in Wales far below the sea. It is said the Phoenicians

met her seeking tin and they kept the secret for long generations from the then civilized world in the eastern Mediterranean. On that point I am no authority. But I do know that in the last early months of the year when London is grey and cold, the first flowers—the lilacs and the hollyhock and the narcissus which bring gladness and a sense of spring to the heart—are sent to us by the two thousand Scillians who live in the prettily named six islands of St. Mary, St. Agnes, St. Martin, Treco and Bryher.



It is Galloway

ABBAY CHURCH BATH KNOWN AS THE LANTERN OF ENGLAND

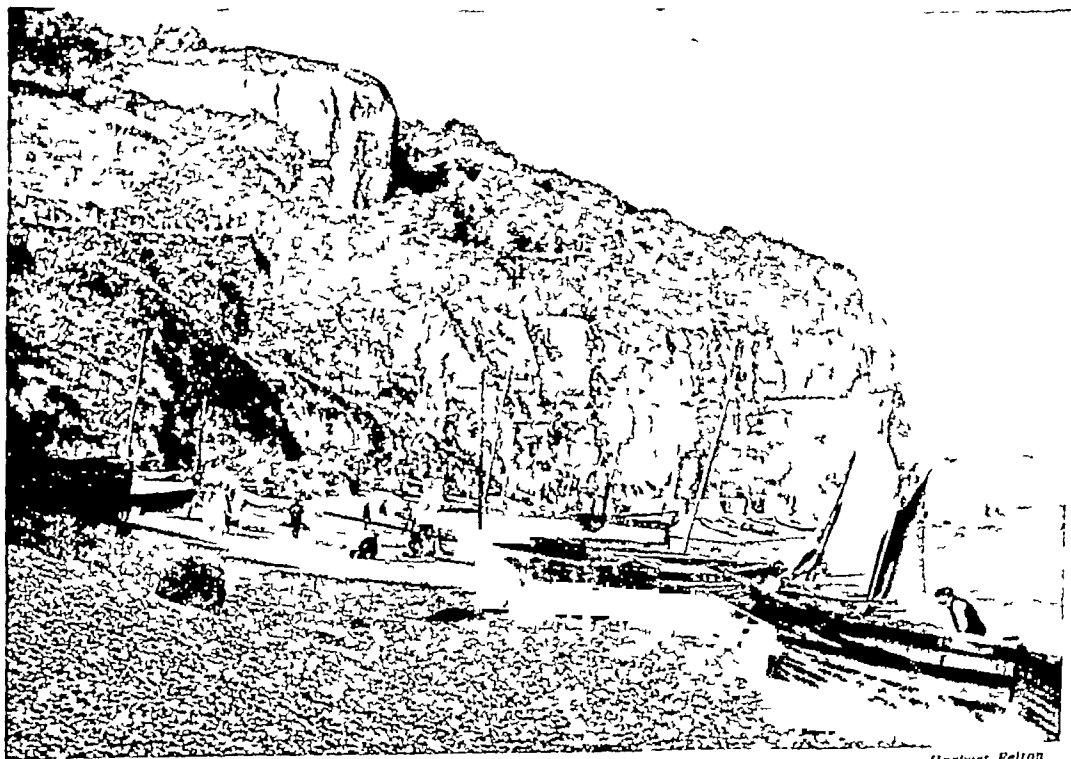
Dating from 1190, Abbey Church is fine example of Perpendicular architecture. It is a small but quaint masterpiece of the master and size of its windows. It is a little of great antiquity and present finer view than any other in England with its freestone buildings are used in series of natural green and backed by hills. It is a great health resort owing to its hot springs.



Underwood

APPLEDORE, DEVON, THE TINY PORT AT THE MOUTH OF THE TORRIDGE

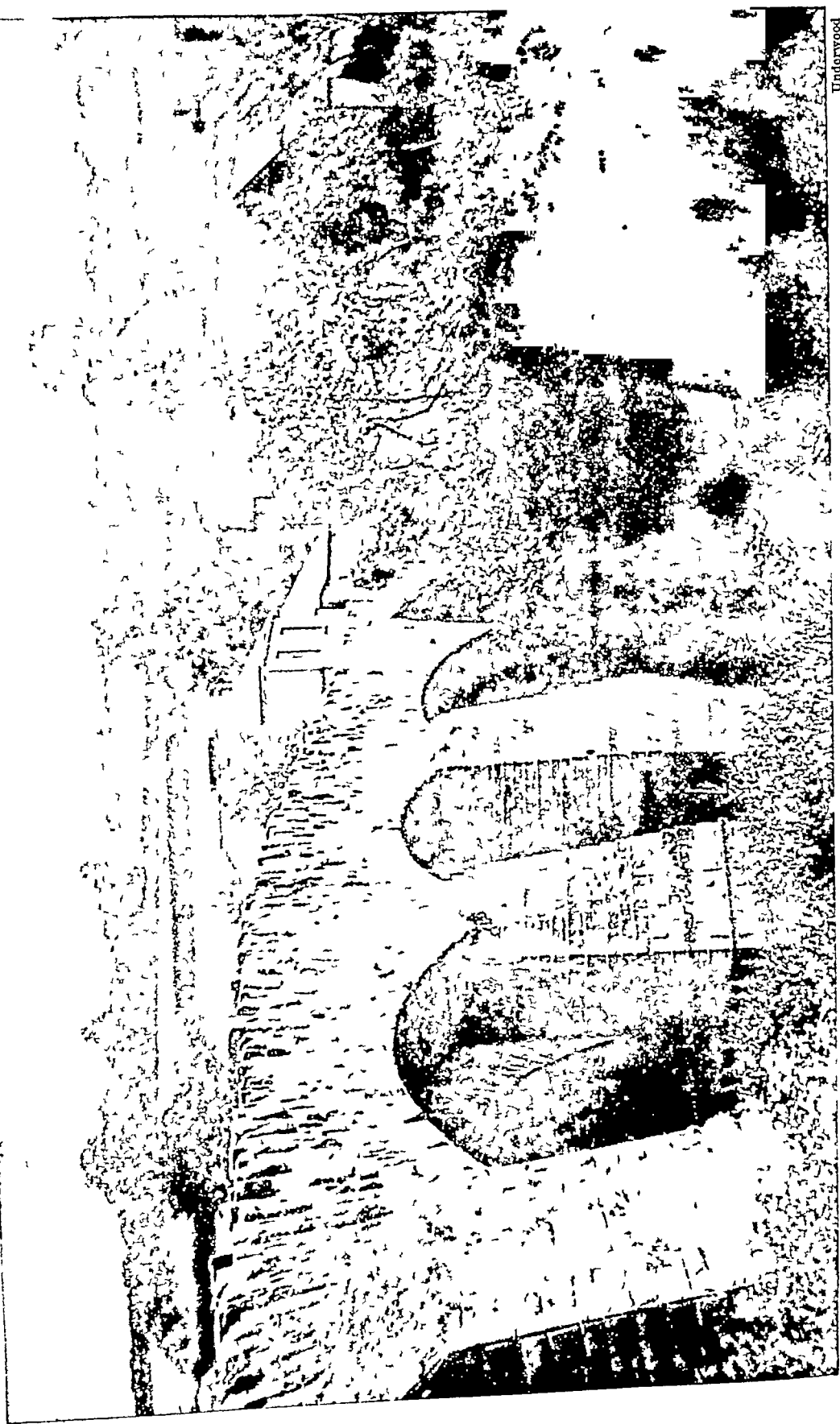
Appledore is really part of the port of Barnstaple, which has lost much of its trade through the silting up of the Taw estuary. The name is a corruption of Aberdour (Watermouth). Shipbuilding and fishing are the main industries. There are also dry docks. Hubba the Dyne was defeated at Bloody Corner, near Northam and buried under a cairn near the quay at Appledore still called the Hubba.



Herbert Felton

CHALK CLIFFS OF A LITTLE FISHING-PORT IN SOUTH-EAST DEVON

Beer lies in a deep ravine opening on to the sea. The sheltered narrow cove suggests the seclusion which the Beer fisherfolk of a past generation found so convenient when eluding the vigilance of the revenue officers. Past masters in the art of smuggling, they have within the last half century adopted less restless pursuits and now engage in peaceful trawling and the manufacture of lace.



Underwood

ONE OF TORRINGTON'S THREE BRIDGES OVER THE TORRIDGE ON ITS COURSE TO BARNSTAPLE BAY

Torrington is built on a hill above the wooded valley of the Torridge, about seven miles from Bideford. In the sixteenth century it was an important centre of the clothing trade with three fairs and a great market. The church was blown up together with 200 Royalist prisoners in 1645, rebuilt in 1651 and again in 1864 and has a very fine Georgian pulpit. Glove manufactures, flour and butter making and leather dressing are the main industries of Torrington, which is also an agricultural centre and a municipal borough and was the site of a very early settlement and possessed a market in Saxon times.

The Cle and Malvern Hills, on the western bank of the Severn and the Wrekin Clent Lacey and Cotswold Hills on the eastern side are really offshoots from the Welsh mountains.

The Devonian system occupies Devon and Cornwall. In the former county there are well moorlands from which springs heights composed of the oldest rocks in the country. Yes Tor (2,300 feet) is the highest point of Dartmoor a rugged and barren plateau. In Cornwall there is Brown Willy (1,100 feet) from which the system declines to Land's End where the cliff rise a hundred feet above the sea. The Quantock and Mendip Hill are offshoot from the Devonian system.

First Line of Highlands and Plains

The second line of elevation is of eolitic formation softer rock that include limestones, sandstones mudshales and clays. Beginning with the Blackdown Hills in Devon the ridge sweeps round by Bath to become a level escarpment in the Cotswold Hills. Edge Hill on the borders of Warwick and Oxford shires is the next highest hill ridge after which it crosses the country to the Lincoln Heights, and finally in the north York moors rises to 2,500 feet.

Still lower is the third line of elevation consisting of rounded grassy chalk hills. They begin in Dorset and in succession form the bare plateau of Salisbury Plain Marlborough Downs Chiltern Hills and East Anglian Heights they reappear in the north of Lincolnshire form the Yorkshire Wolds and end in the bold cliffs of Flamborough Head.

The North and South Downs are spurs thrown off by Salisbury Plain towards the east—the North Downs (972 feet) extend through Hampshire Surrey and Kent to the chalk cliffs of Dover the South Downs terminate in Beachy Head.

The lowlands of England, which account for about two-thirds of the whole area are marked off into five principal plains, which are more or less

connected with each other. The Vale of York lies between the eastern slope of the Pennines and the hills of East Yorkshire. The western plain west of the Pennines includes the greater part of Lancashire and Cheshire. The central or midland plain 200 to 400 feet above the sea is higher than the two foregoing plains although it connects them. It occupies the counties of Stafford Derby Leicester and Nottingham.

Reclamation of the Fens

The Fen district (625 square miles) around the borders of the Wash is the most perfectly level portion of England. At one time little better than a morass it has been converted by drainage into a highly productive district. Not a little of the land has been reclaimed from the sea, from which it has to be protected by dykes as in Holland. In the seventeenth century the Duke of Bedford expended large sums in drainage and hence the district is commonly known as the Bedford Level. The eastern plain bounded on the west by the East Anglian Heights and the Chiltern extends from the Wash southwards to the North Downs. The Weald of Kent abounds in beautiful scenery.

Benefit of Atlantic Tides to the West

The coastline of England and Wales, owing to its numerous indentations has a total length of about 3,000 miles or one mile of coast to 22 square miles of surface. So deeply is the land pierced by the sea that every part of England is within 70 miles of the sea. The Atlantic tidal wave passing up the west coast gives Bristol an increased depth of water of over 40 feet and Liverpool 26 feet after going round the north of Scotland the tide gives Hull only an additional 18 feet of water and London 19 feet. Regular and high tides are of immense service to shipping rendering shallow waters safely navigable and on the flood ships float to ports that are a considerable distance inland.

On the east coast, between Berwick and the Strait of Dover, there are only three large indentations. The Humber, the estuary of the Ouse and Trent, has a drainage basin of 9,770 square miles, the largest in England. Although impeded by sandbanks and shoals, sea-going vessels can get up to Goole, at the junction of the Ouse with the Don. By means of navigable rivers and canals the Humber is connected with the Mersey, Severn and Thames.

The Wash, into which the Fen district drains, is difficult and dangerous to navigate on account of shifting sandbanks. Much of the Wash will some day be reclaimed from the sea.

Features of the East Coast

The estuary of the Thames, which is six miles wide at the Nore, is not only England's chief commercial waterway but the most important in the world.

The most easterly cape is Lowestoft Ness, in Suffolk, North Foreland and South Foreland, in Kent, are famous "white cliffs" of England. The only islands on the east coast are off Northumberland, they are small, but one of the Farne Islands was made famous by Grace Darling's heroic deed in 1838. The Yarmouth Roads, between the coast and a line of sandbanks, afford safe anchorage for ships, and between North and South Foreland lie the Downs, a famous anchorage, protected seawards by the Goodwin Sands. The Strait of Dover is a busy waterway to France, and much of the foreign and colonial trade of London passes through it.

Harbours of the South

On the whole the south coast is low from Dungeness, in Kent, to the Isle of Wight, which is separated from the mainland by Spithead and Solent, four and three miles across respectively. The island shelters Portsmouth Harbour and Southampton Water, Portsmouth is England's greatest naval station, and Southampton is a busy port with important steamship services to America, South Africa and Australia.

Farther west, in different bends of the coast, there are the harbours of Poole and Weymouth, followed by a wider bend containing Plymouth Sound and Falmouth Harbour, important natural shelters, and between Lizard Point (the most southerly cape) and Land's End (the most westerly point) there is Mount's Bay, on which stands Penzance.

The islands off the south coast are of considerable importance. The Isle of Wight has an area of 150 square miles, and is named the "Garden of England," because of its genial climate and beautiful scenery. The Channel Islands are quite close to France, and French is the common tongue of the people, but the islands have been attached to England since the Conquest. The total area is 75 square miles and the population 90,000. The climate is mild, and early vegetables are produced largely. Jersey is the largest island.

Although a good portion of the west coast belongs to Wales, it may as well be viewed in its entirety. The three great openings are the Bristol Channel, Cardigan Bay and the large bend formed by the Irish Sea.

Britain's Largest Inlet

The Bristol Channel, leading into the estuary of the Severn, cuts so deeply into the land that the upper part of it is little more than 100 miles from London. This largest inlet of Britain has a Welsh shore on the north, containing Carmarthen and Swansea Bays and Cardiff Roads, on the south coast of the channel there are Barnstaple and Bridgwater Bays. Bristol is on the navigable waterway formed by the Avon before entering the estuary of the Severn. The port had an early trade with the New World, it has a large fruit trade with the West Indies, and cocoa and tobacco are still its chief manufactures. The size of modern vessels necessitated the construction of large docks at Avonmouth. At Gloucester, on the Severn, the incoming tide forms a bore that hindered commerce, but the Severn Ship Canal



VISTA OF THE HIGH STREET IN TOTNES, A TOWN OF OLD DEVON

One of the oldest (if not the oldest) municipal boroughs in England Totnes is situated on the east bank of the River Dart, five miles east of Torquay Devon. It consists chiefly of one long street the High Street flanked by quaint old buildings, while two gates, raised Norman style and the fifteenth century church of St. Mary are among the town's most interesting architectural features.

gives Gloucester a good passage to Sharpness for vessels of 350 tons

On the west coast of Wales there is Milford Haven, one of the finest natural harbours in the world, but too remote from the great industrial centres to be of commercial importance. Cardigan Bay washes four Welsh counties. Menai Strait, between the mainland and Anglesey (an island and a county), is 14 miles long with a width varying from 200 yards to two miles. It is difficult to navigate for vessels of more than 100 tons, and the great shipping traffic to and from Liverpool passes the western side of Anglesey. From the strait the land curves eastwards to the mouths of the Dee and Mersey. The Mersey, though only 68 miles long, has an estuary known as the Liverpool Channel, which is one of the world's busiest waterways.

Carlisle's Lost Port

From the Mersey the coast trends generally northwards to Morecambe Bay, and then, rounding Cumberland, the land again curves in to form Solway Firth, which has part of the south coast of Scotland for its northern shore. The firth is stormy, and is plagued by a bore that sometimes runs six feet high and from eight to ten miles an hour, occasionally doing much damage to small shipping. Carlisle in olden times was a port, but lost its connection with the sea by the silting up of the firth.

England's Largest Island

The Isle of Man is in the Irish Sea, 75 miles north-west of Liverpool. It has an area of 227 square miles and a population of 60,000. It is rich in minerals, especially lead. The island, after passing through various hands, was granted by Henry IV to the Stanley family, and later it passed to the Duke of Atholl, from whom the Crown purchased it in 1827. The island has a legislature independent of the English Parliament. The chief towns are Douglas, Peel and Ramsey.

The Scilly Isles, 25 miles south-west of Land's End, number about 140, but only six of them are inhabited. The largest is St. Mary's. The climate is moist, and so mild that sub-tropical plants grow out of doors all the year round. Early spring flowers—narcissus, lily, daffodil—are grown in immense quantities.

As England is a small country it follows that the rivers are of no great length. Those on the shorter slopes of the western highlands are swift and flow more or less in a straight line to their outlets. But the rivers on the longer slopes, rising at no great elevation, have weak currents and they meander across the plains and lend themselves to navigation. The rivers may be arranged according to the watershed they drain. The main slope is towards the east, the shorter slopes towards the south and west. The eastern slope is the longest, and contains several streams with lengths of between 150 and 200 miles.

Inland Navigation by River

The eastern watershed is drained by the rivers that enter the North Sea. The Tyne and Tees, each about 70 miles long, are the outlets of the great Northumbrian coal-field and the Cleveland iron district. The Ouse (150 miles) and the Trent (180 miles) between them drain an area of nearly 10,000 square miles into their joint estuary, the Humber. The Ouse is navigable from the Humber to York, and on the Trent barges can reach Burton, 105 miles from the estuary.

The Thames (210 miles) has a noble estuary which is the chief commercial waterway of the world. London has been a port since the times of the Romans. The river supplies the city with a great deal of its water and carries much of its sewage to the sea. The largest ships can enter Tilbury Docks, 26 miles below London, but vessels of 800 tons can ascend to the Pool at London Bridge, and barges can reach Lechlade 120 miles from the North



ENGLAND *In Charlton Forest on the Sussex Downs are magnificent beeches—century old giants among the finest in the south of England*
1837



ENGLAND Housler Pass runs north-west from Borrowdale towards the south-east extremity of Buttermere, rocky and precipitous, the scenery is some of the wildest and most desolate in the world.
G. F. Abraham



ENGLAND Originally extending from Solway Firth to W allsend the Roman rampart 73 miles long was built by Hadrian as a protection against the unsubdued northern tribes This section is seven miles west of Corbridge



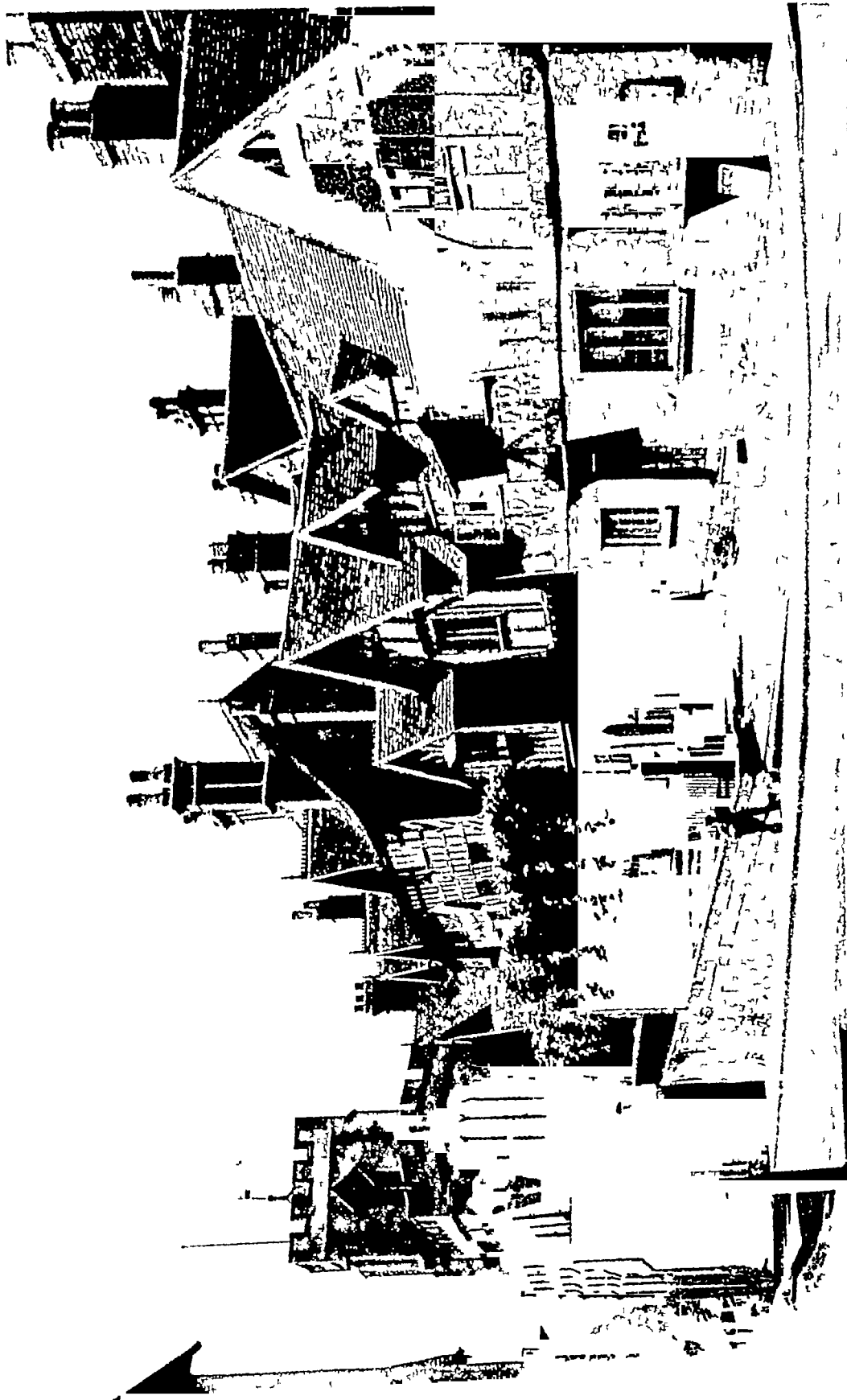
F. Deaville Walker

ENGLAND *God's Providence House, an old timbered building at Chester, said to have been so named after escaping the Great Plague*

1840

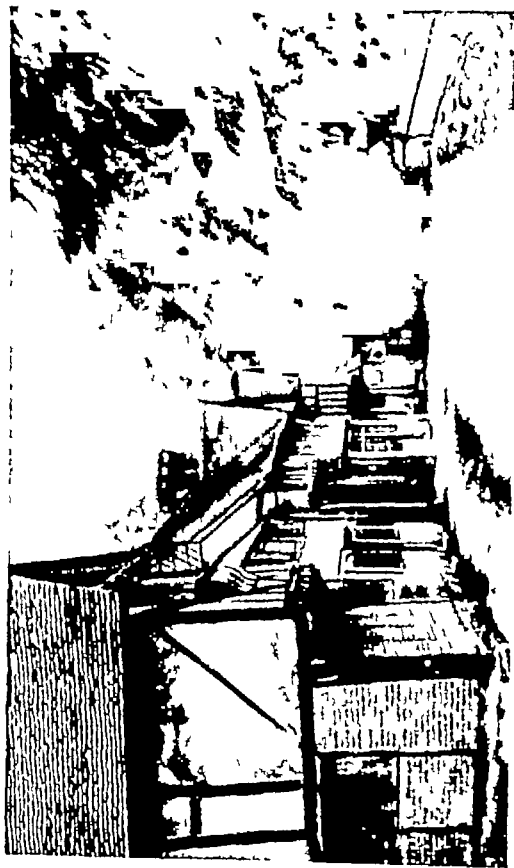


ENGLAND A well preserved building of the sixteenth century with
 portaged façade Sparrowe a House stands in Ipswich a Buttermarket
 1841



Underwood

ENGLAND In ancient Warwick, close to the twelfth-century West Gate, rises a fine example of half-timbered architecture of the late fourteenth century—Lord Leicester's Hospital, an asylum for twelve poor brethren



ENGLAND. Six miles from T. bridge is a had long time in the vale between the North and South Downs called the H. call. Its all would our numerous H. austerly. It is provide for my settings for current graph plays

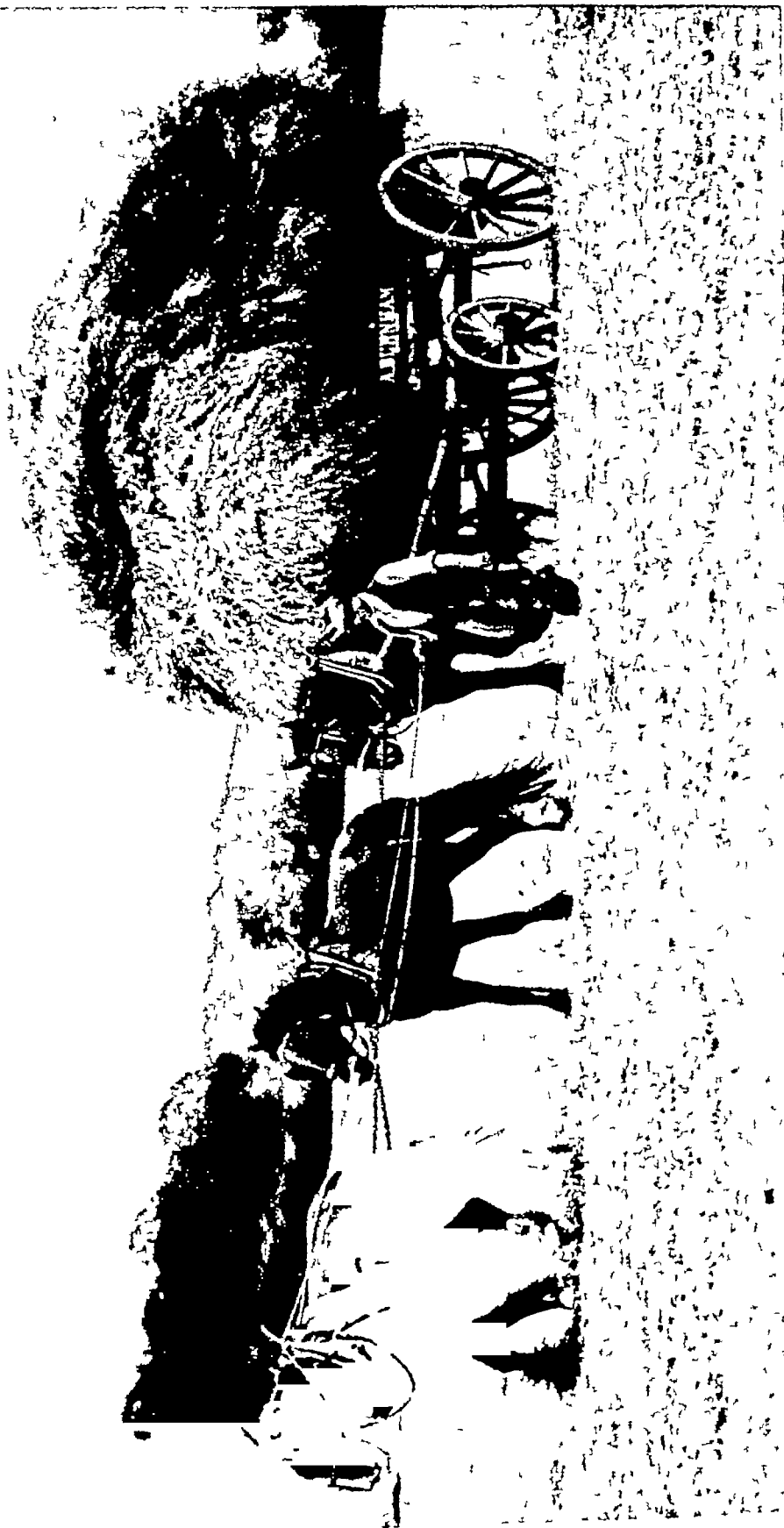


Herbert F. H. m.

ENGLAND *The Weavers' Hall at Canterbury is a relic of the Walloons who brought silk weaving to the city in the sixteenth century*



ENGLAND Standing in lovely grounds Hatfield House, Hertfordshire seat of the Cecils is a fine Jacobean mansion built in 1610-11
 1845

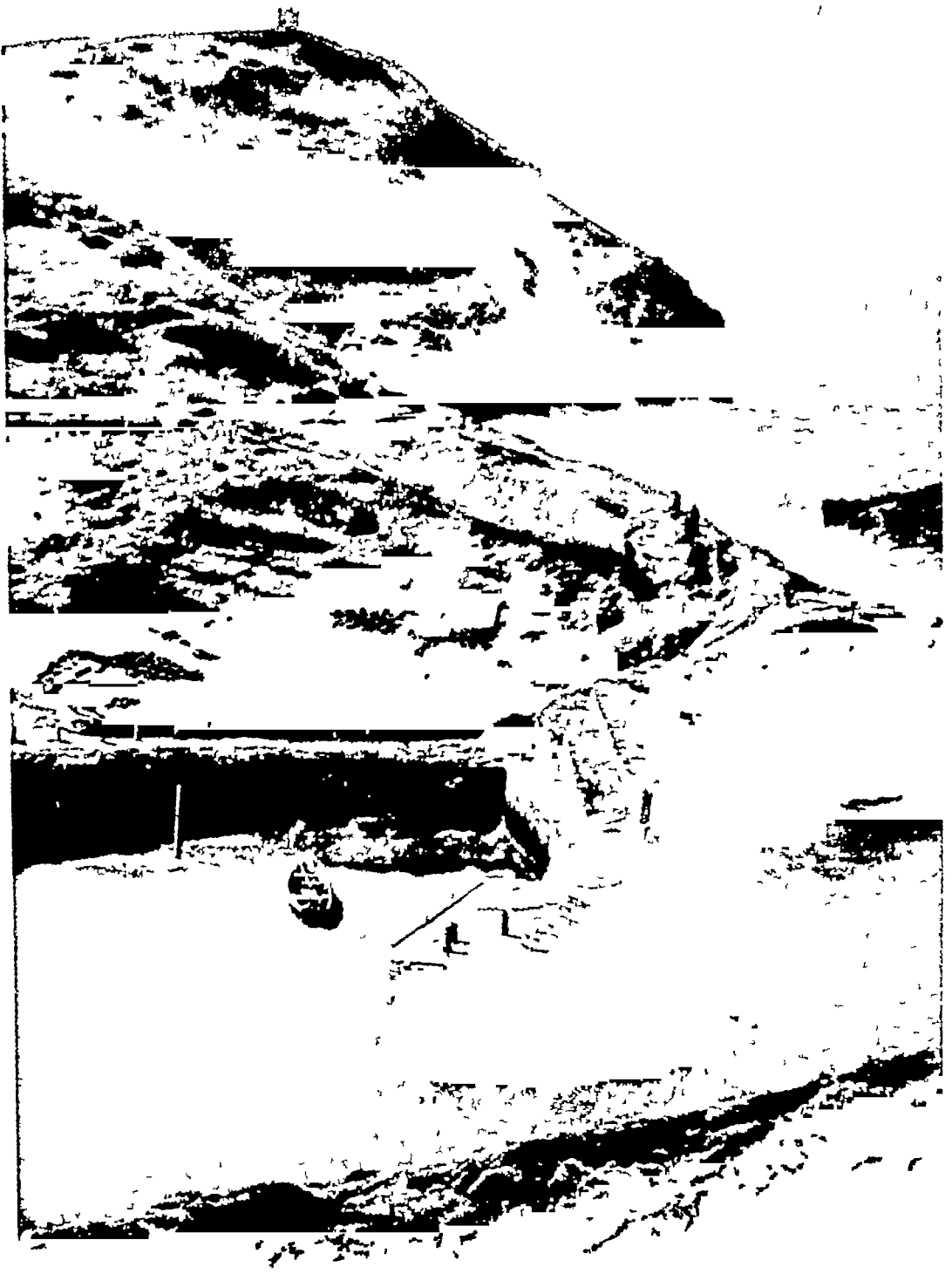


ENGLAND Harvesting hay on a farm at Baruel Though such a scene is common in rural Hertfordshire, a highly cultivated agricultural county, it excites a feeling of surprise when encountered so near London

Sport and General Press Agency Ltd



EARLAND, Texas, lands contain so much romantic interest in so tall a country, a park remarkable for the grandeur of cliff and cave and decorated the the heart of the lovely garden of the the Channel Islands.



Underwood
ENGLAND *Boscastle Harbour's mouth is flanked by steep slopes
of wild waste land typifying the stern beauty of the Cornish coast*
1848



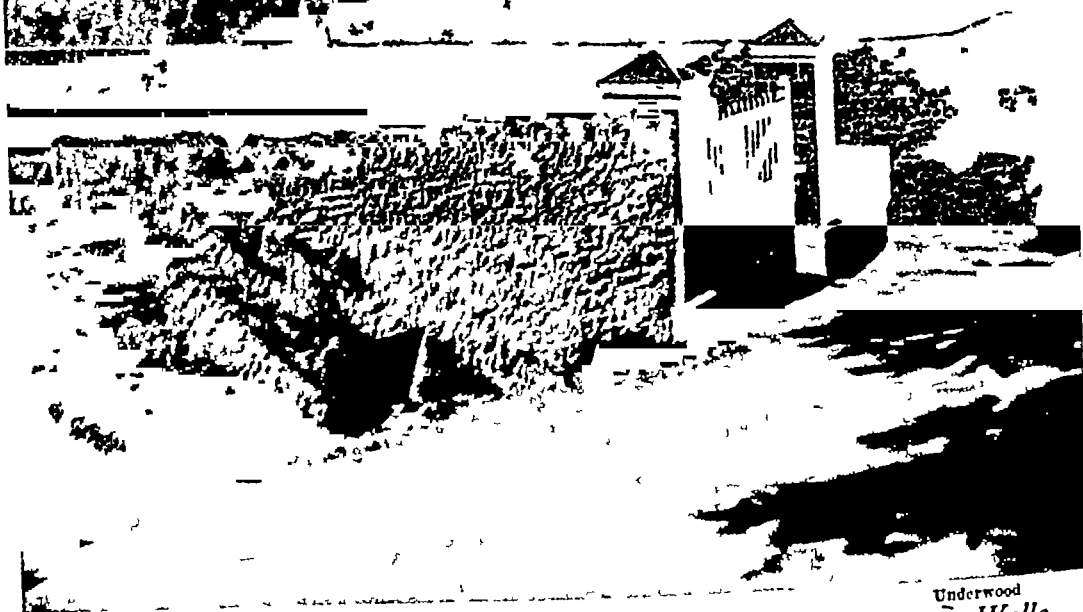
ENGLAND Monsal Dale, an enchanting valley watered by the Ilze
in the Peak District is a favourite resort with lovers of rural scenery



Underwood
ENGLAND Lying on the Thames, twenty-two miles from London, New Windsor is dominated by its famous castle which was founded by William I and has been for more than eight centuries the home of England's sovereigns



ENGLAND. A quiet little port watering-place and urban district of Cornwall where seafaring and pastoral pursuits go hand in hand. Looe is set on both sides of the river of the Looe sixteen miles west of Plymouth.



ENGLAND Built chiefly in the twelfth and thirteenth centuries, Wells Cathedral, Somerset, is a grand type of Early English architecture

them unmistakable oceanic influence. In the hottest month (July) they modify the heat, which otherwise would have a much greater mean temperature than 61.5°F . In winter the effect is not less marked for the south-west wind, sweeping up the Bristol Channel and thence across the country along the edge of the oolite escarpment, pushes the centre of cold from the Midlands to the east coast. A similar wind up the estuary of the Mersey is of considerably less effect, for it is deflected and largely lost by blowing squarely against the Pennines.

Mountains and the Rainfall

The mountain chains in the west, while they condense the warm westerly winds that strike upon them, are not high enough to prevent a great deal of moisture from passing to the eastern side of the country. The heavier rainfall on the western side of the mountains gives rich pastures to the west, while the eastern region yet gets sufficient moisture to grow corn. The general effect is well illustrated in the central belt of country from west to east. On the lower coastlands of Cardigan Bay the rainfall is from 40 to 60 inches, in the Welsh mountains it is from 60 to 80, in the border counties from 30 to 40, except in the neighbourhood of the Shropshire heights, where it is from 40 to 60 inches, and across the remainder of the country to the east coast it averages from 25 to 30 except in Fenland, where it is less than 25 inches.

winter temperature would be higher. The absolutely wettest region in England and Wales is around Snowdon where the annual rainfall is about 200 inches; the next wettest is Cumberland especially in Borrowdale, the driest is round the Wash and the estuary of the Thames.

The mean annual temperature of England is 50° , varying from 52° in the Scilly Isles to 48° at the mouth of the Tweed, the annual rainfall averages 30 inches, and what is of immense importance, it is pretty evenly distributed throughout the year. On the whole the climate is mild, equable and salubrious, it is sufficiently hot in summer to ripen fruits and corn, but not too hot for labour to be endured all day, and in winter it is not cold enough to bring outdoor labour to a standstill.

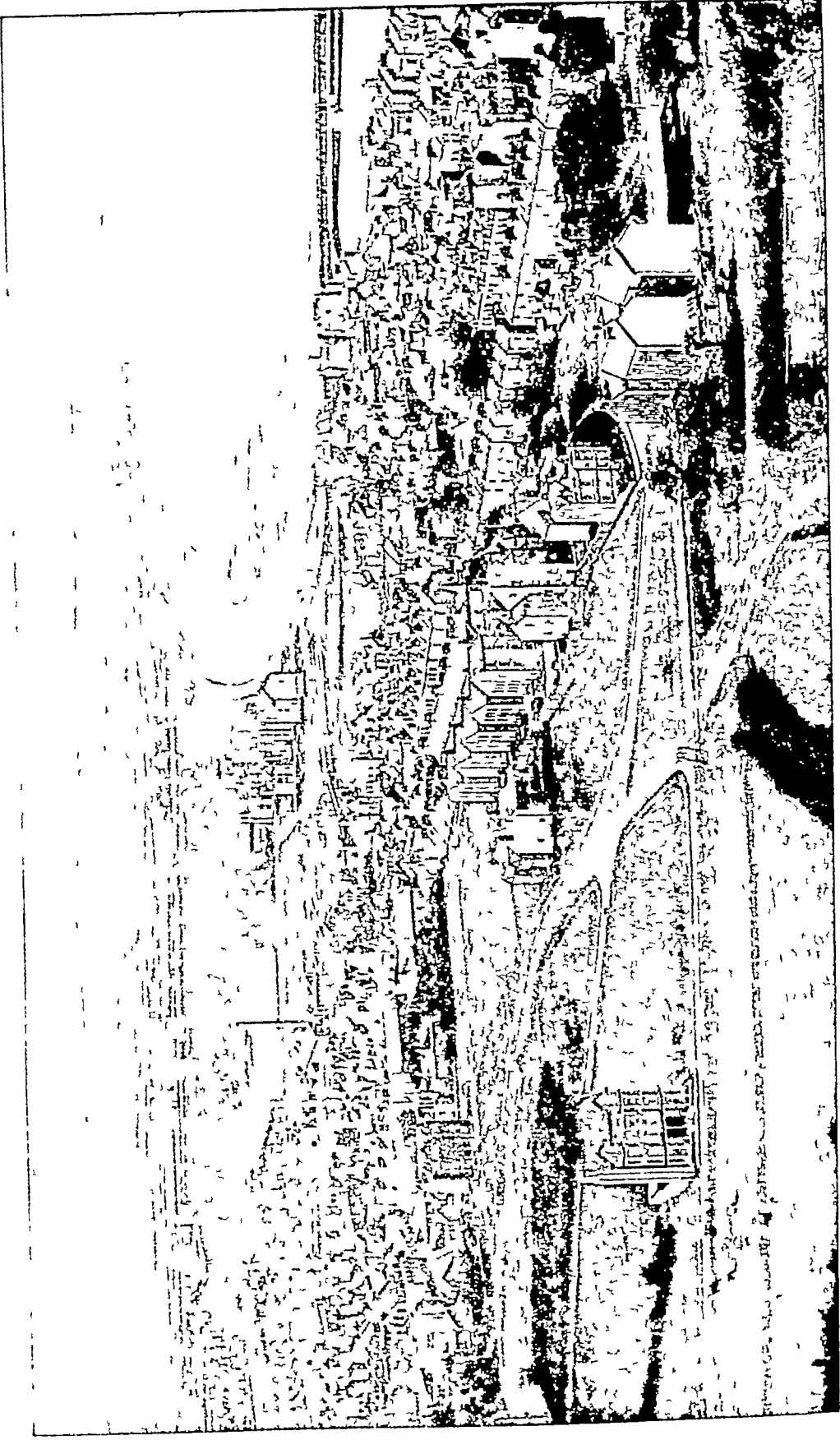
Important Artificial Vegetation

England falls within the North European region that is generally characterised by the luxuriance of the pastures, and numerous forests in which the predominant trees lose their foliage in winter. Thanks to the general humidity and mildness of the climate, the country exhibits a constant state of verdure. There is scarcely a single plant in the island that is not found in the neighbouring continent. In ancient times England was covered largely with forests in which the chief trees were oak, elm, birch, beech, pine, ash, etc. Although there is now an absence of extensive forests the country is



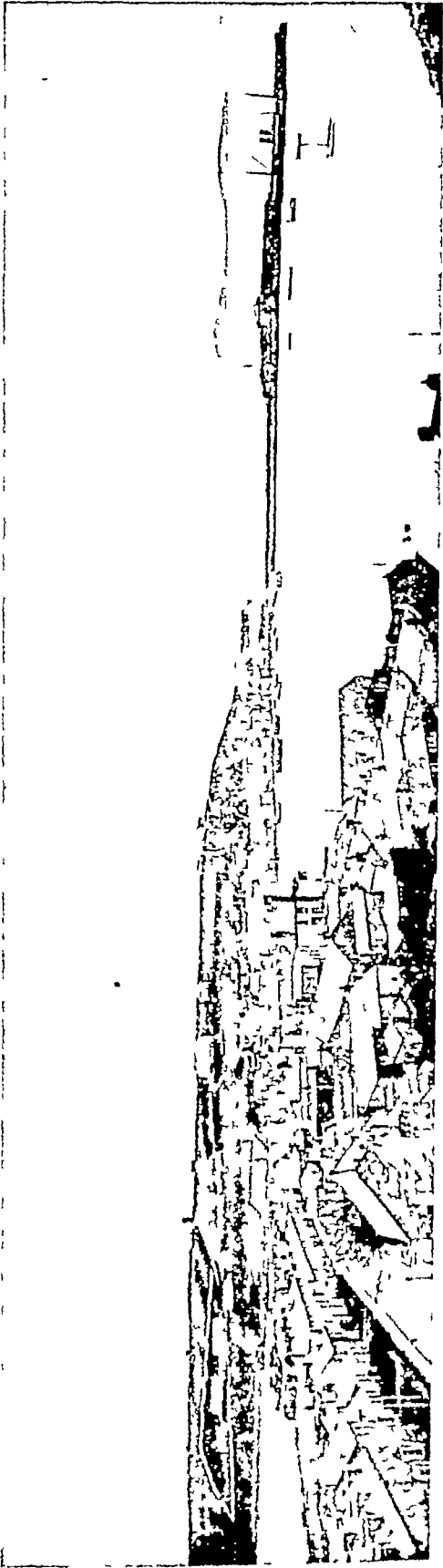
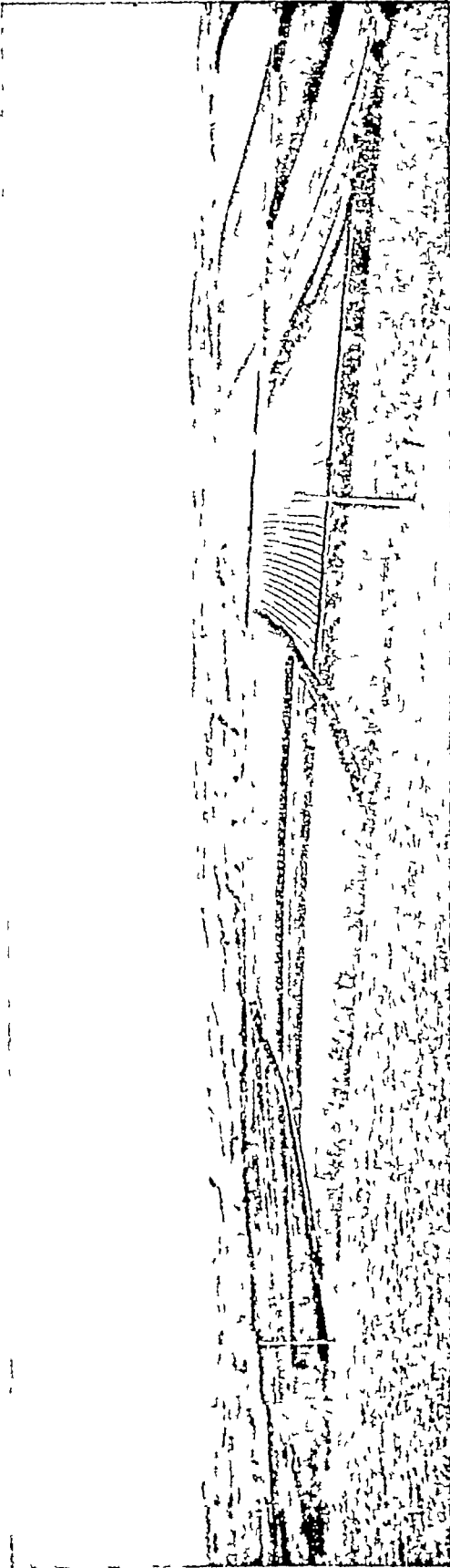
VIEW OF YARDY STREET FROM AN OLD STREET

THE YARDY STREET, LONDON, ENGLAND. THE VIEW IS FROM THE OLD STREET, LOOKING DOWN THE YARDY STREET, TOWARDS THE BUILDING WITH THE GABLED ROOF.



RAMSEY TOWN AND BAY, A POPULAR PLEASURE RESORT IN THE ISLE OF MAN

Although part of the British Isles, the Isle of Man in the Irish Sea has a government and constitution of its own. It lies 27 miles from the west coast of England and has an area of 227 square miles. Mountainous in the north, it has a wealth of picturesque scenery, and as a pleasure resort and beauty spot it attracts innumerable visitors. Ramsey, a town of some 4,300 inhabitants, is situated on the bay of the same name, which has a grand sweep of ten miles. Though quieter than Douglas, Ramsey is a great holiday resort with an excellent sandy beach, beautiful promenades and a pier 2,300 feet in length.



FLOWER FIELDS OF ST. MARY'S AND A VIEW OF HUGH TOWN, CAPITAL OF THE SCILLY ISLES

The Scilly Isles lie 25 miles from Land's End, Cornwall, and consist of six large islands, about thirty small ones and over 100 islets. St. Mary's is the largest, about two miles in length and breadth and enjoys an equable climate semi-tropical trees and flowers flourishing among the luxuriant vegetation, on it is Hugh Town, seen above the capital of the group and landing place of steamers. The inhabitants are chiefly engaged in growing flowers and vegetables, and the top photograph shows the broad stretches of cultivated ground which in their season produce the beautiful narcissi, lilies and daffodils of the London markets.

manufacture of cotton goods is confined practically to Lancashire in which county there are nearly 57 million spindles or more than one-third of all the spindles in the world. One-fifth of the manufactures are for the home market and the remainder for export. India is generally the principal customer and Egypt and Australia buy largely.

The woollen mills are chiefly in Yorkshire with Leeds and Bradford the centre of a group of woollen towns. There are large manufactures of miscellaneous textiles as lace, hosiery, worsted carpet, etc.

The metal industries are located on the coal fields. The chief iron-smelting centres are Barrow, Middlesbrough, Rotherham, Black Country, etc. In 1913 there were 335 blast furnaces at work producing more than 10,000,000 tons of pig iron but in 1923 only 700 furnaces were in operation producing 7,437,000 tons. The steel production was 8,350,000 tons. In 1884 England's production of pig iron was nearly double that of the United States; in the next twenty years the position was reversed and since then England has fallen still further in the rear.

Machinery Made Where Used

Although everything in iron and steel is produced on all the English coal fields, some districts specialise in certain directions. Birmingham and the Black Country are the hardware factories of the world, the productions including everything from a pin to a steam engine, from a button to an immense bridge girder. Sheffield makes iron and steel plates, and is preeminent for cutlery. Dudley district for chains and cables. Tyne and Tees districts for heavy ironwork, railway plant, ordnance, etc. The machinery for the different manufactures is generally made in the district in which it is used. Thus in Manchester, Oldham and Rochdale for cotton machinery; in Leeds, Bradford and Keighley for woollen and similarly agricultural implements are largely made at Lincoln, Grantham,

Peterborough and Norwich. Railway locomotives are constructed by the great railway companies in what have become railway towns as Crewe, Swindon, Ealing and Doncaster. The electrical industry is large, especially in London, Manchester, Birmingham and other machinery centres. London is a great manufacturing centre for furniture, clothing, chemicals and railway plant, and it is one of the largest engineering centres of the world.

Local Specialisation

Earthenware is produced mainly in North Staffordshire at Stoke-on-Trent and neighbouring towns known as the "Potteries." Northampton, Leicester and Stafford are noted for boots and shoes. Newcastle and St. Helens for glass. Widnes, Luncorn and Oldbury for chemicals.

The excellence of British shipbuilding is reflected in Britain's maritime supremacy. The chief English yards are on the Tyne, Wear and Tees, and at Barrow, Hull and Birkenhead. There are naval dockyards at Chatham, Sheerness, Portsmouth and Devonport.

For easy means of transit by river and canal, road and railway, England is unrivalled. There are nearly 1,000 miles of navigable rivers and 3,000 miles of canals; the public roads have a total length of 150,000 miles and the railways more than 16,000 miles. Much more effective use might be made of the canals if the railway companies had not been permitted to become canal owners with a view to preventing competition.

Road and the Motor Traffic

Nevertheless these waterways carry more than 40 million tons of minerals, chemicals and general merchandise. The Manchester Ship Canal carried nearly six million tons of sea-borne traffic before the Great War, after which this traffic was reduced by about a half.

Owing to the increasing importance of motor traffic, great improvements are being effected in the roads, costing as much as £50,000,000 in a single year.

England, the birthplace of the railway, has a close network of rails over the coal-fields and industrial districts, and they penetrate into the less populated regions as branches of the trunk lines, of which there are nine radiating from London. For regularity, speed and safety British railways are not equalled in any other country. The English and Welsh lines were worked by 27 companies until 1923, when the whole of the railways in Great Britain were organized into four great groups for more economical and effective working.

Progress in Transport

During the present century electric railway traction has made great progress, specially in the metropolitan area, where underground tube railways deal with a huge city and suburban traffic.

The railways in Great Britain in 1913 carried nearly 1,185 million passengers (excluding season-ticket holders), and the goods traffic totalled 364 million tons, in 1921 the passengers were increased by 33 millions, but the goods decreased by 44 million tons.

There are regular air services London—Paris, London—Rotterdam, London—Amsterdam—Berlin. In the last named the journey of 673 miles takes $8\frac{3}{4}$ hours, including halts at Amsterdam and Hamburg. A service of airships between England and Australia has been approved. The air vessels will be of 150 tons displacement, carrying 200 passengers and 11 tons of mails and merchandise. The estimated time-table is London—Egypt in $2\frac{1}{2}$ days instead of 6 days, Bombay, 5 days instead of 15, and Australia 11 instead of 28 days.

Vast Communication System

The British telegraph cable systems are more extensive and perfect than any other country can claim. Of the world's total cables of 298,000 miles, British companies own 130,000 miles. The greatest cable in the world was completed in 1923 between Weston-super-Mare and Long Island.

During the year 1922 the Post Office despatched 87 million telegrams, and the telephone calls numbered 872 millions. The telephone stations number about a million, and there are more than four million miles of wires. The number of telephones in Great Britain is two per hundred of the population, as against six in Sweden and thirteen in the United States of America.

Occupying a most favourable position for ocean communication with all other places, England's mercantile navy not only maintains regular services on all the great ocean routes, but her tramp steamers traffic in all the seas of the world wherever there is a cargo to be picked up. British ships carry an immense amount of freight for other nations, and a great number of ships sailing under foreign flags were built in British yards.

Balance of Imports and Exports

The figures for 1900 were not only a record, but they showed an increase of no less than 63 million pounds on the previous year, the largest yearly increase since 1880, when the total trade leapt by 86 million pounds. It was true that imports exceeded exports, which the pessimists claimed was a sign of economic decay. Imports, however, began to exceed exports as far back as the 'fifties. In any case an excess of either imports or exports is no reliable guide to commercial prosperity or the reverse. The value of exports is increased by freight charges and traders' profits, to which may be added income from foreign and colonial investments, which are a form of "invisible exports" that go to make up the balance between imports and exports.

At one time British commerce was double that of any other country. In 1908 the trade of Germany amounted to 690 millions and the United States to 630 millions. The latter, with immense natural resources and more than double the population of Great Britain, must of necessity overtake and pass her sooner or later.



THE NEEDLES, ERODED CHALK ROCKS OF THE ISLE OF WIGHT

The Needles of Wight, a group of chalk rocks, is separated from the mainland by the Solent and is about 10 miles long and 10 miles wide. It is the only island in the county which is not a part of the mainland. The group of rocks is made of chalk and is very steep. The highest point is the Needles Lighthouse, which is 100 feet high. The rocks are very craggy and are very dangerous to navigate.



GATEWAY OF THE NORMAN CASTLE OF CARISBROOKE, ISLE OF WIGHT
Carisbrooke Castle, near the village of Carisbrooke, about one mile south-east of Newport, was founded in early Norman times as a fortress for the defence of the Isle of Wight. The keep was added in the reign of Henry I, and Elizabeth I enlarged the fortifications, while here the ill-fated Charles I. passed 4 months of imprisonment, 647-48. This noble gateway dates from the fourteenth century.

Before the Great War half the world's shipping flew the British flag. In 1922 the total number of vessels afloat of 100 tons and upwards was 33,935, aggregating 64,370,786 gross tons, of which the British share was more than one-third—namely, 11,321 vessels, totalling 22,042,520 tons. British ships, however, include a great proportion of the largest vessels, and in particular predominate on the great routes. Unfortunately there are far more ships to-day than are required for the goods awaiting carriage.

Vital Shipping Statistics

In 1913 the total ocean shipping entered and cleared in Britain's home ports was 116,883,000 tons, and in 1922, 103,006,000 tons. Of the tonnage entered in 1922, 66 per cent was in British bottoms, and of the tonnage cleared, 62 per cent. Of the total tonnage London claimed over 21 million tons and Liverpool over 18 million tons, or nearly a fourth of the whole for those two ports alone. Cardiff, Newcastle and Shields, Southampton, Glasgow and Hull, in the order named, dealt with about another quarter.

The coasting trade of the kingdom in 1913 was 130,000,000 tons, this had decreased by a third in 1922.

Growth of Cities at Rural Expense

Before the enormous rise of England's manufacturing interests in the latter half of the eighteenth century half of the then population of eight millions was engaged in agriculture. In 1921 the population of England and Wales was 37,885,432, of whom more than 30 millions lived in towns, and only 1,260,000 were engaged in agriculture and fishing. There is still a steady migration to the towns. In 1891 72 per cent of the people were urban and 28 per cent rural, in 1921 the figures were 79 and 21 respectively. At the census of 1921 the industrial workers numbered 9,468,000, commercial, 2,214,000, domestic service, 2,121,000, agriculture and fishing,

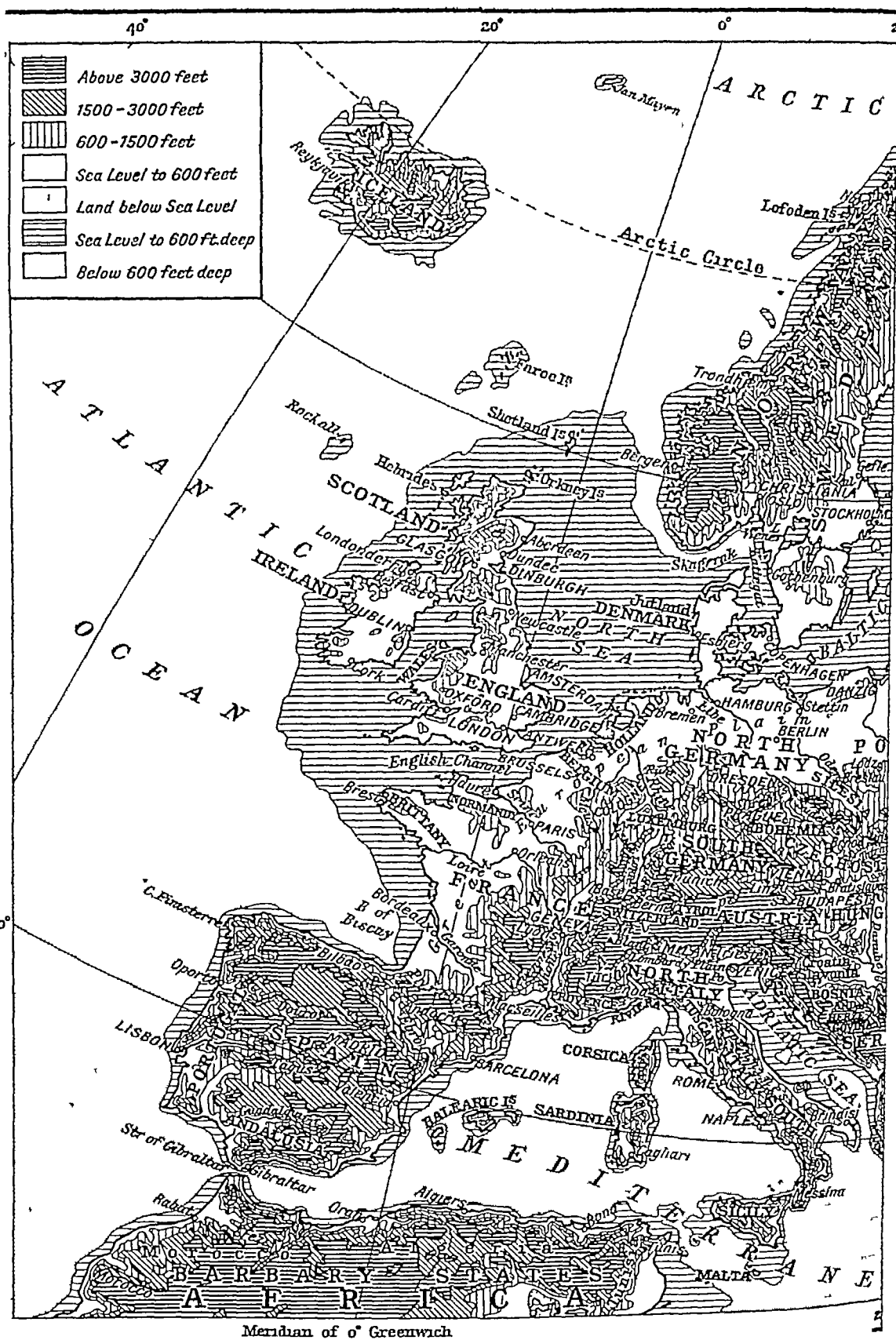
1,260,000, professional, 714,000, Government, 300,000, and the unoccupied persons numbered 2,208,000 men and 12,234,000 women.

Greater London, with a population of 7,476,168, or more than one-fifth of the total population of England and Wales, is not only the capital of England but of the British Empire. It is the largest city in the world, half as large again as the city of New York, the next in size, and about equal to Paris and Berlin combined. The next largest cities in England are Birmingham (919,000), Liverpool (803,000), Manchester (730,000), Sheffield (490,000), Leeds (458,000), and Bristol (377,000). There are nine towns with populations of between 200 and 300 thousand, and 20 with populations exceeding 100,000.

Problems of Health and Housing

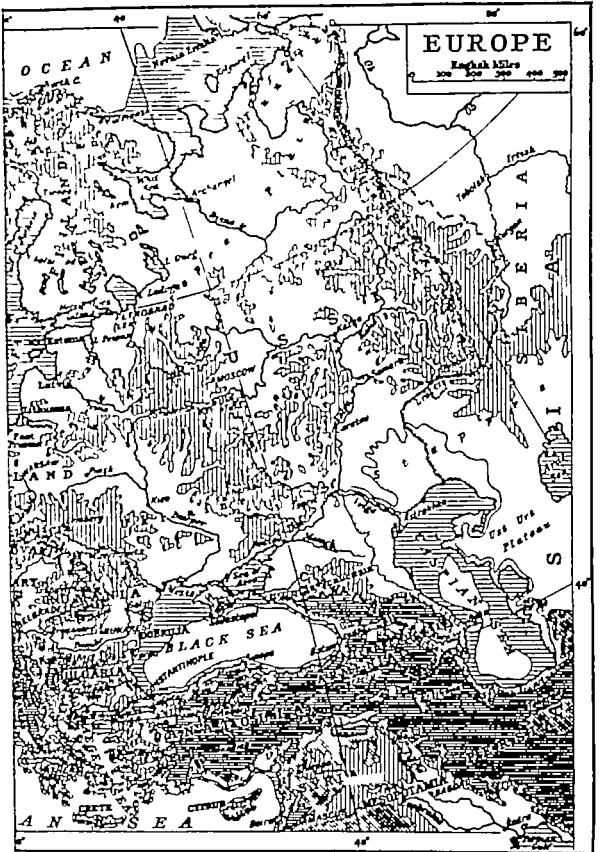
The congregation of vast numbers of people in limited areas gives rise to slums, that present great problems in housing, sanitation, etc. There have long been model garden villages at Bournville and Port Sunlight, and there is now much attention paid to town planning, in which direction Letchworth is the largest example, while a number of cities have laid out garden suburbs to assist the normal growth on healthy lines.

The local government of the country is carried out under the central control of the Ministry of Health, whose efforts during recent years are crystallised in the results. The death rate in England and Wales in 1921 was 12.1 per thousand as against 14.3 for the ten years previous. The actual number of deaths was 458,710, the smallest total since 1862, when the population was little more than half that of 1921. In 1901-10 the mortality of infants under one year of age was 22.6 per cent of the whole deaths, it was reduced to 15.3 per cent in 1921. The medical war on tuberculosis is showing increasingly good results, but the cancer scourge, which in 1888-91 accounted for 6.6 per cent of the deaths of persons of 35 years and over, had risen to 15.3 per cent by 1921.



Meridian of 0° Greenwich

RELIEF MAP OF EUROPE, THE PENINSULAR CONTINENT-



—HEIGHTS AND DEPTHS OF LAND AND SURROUNDING SEA

This was the south-east coast of ancient Arctis of which Finland, Norway, Sweden, the northern half of Scotland and the north-west of Ireland are relics. All these areas are old land, the worn-down stumps of ancient mountains, scarred and hollowed by the passage of glaciers during the Ice Age, overlain with glacial debris in long moraines, and diversified in scenic features to-day by lake and fell, moor and forest, stream and waterfall.

How Europe Rose Out of the Sea

About the period when the giant club mosses dominated a landscape of swamp and marsh, when the land south of the ancient plateau was covered with the jungle forest from which our supplies of coal originated, giant forces gradually raised an east-west system of mountains roughly along Lat 50° N. These old Armorican and Variscan mountains are left to us as the heights of South Ireland, South Wales, Cornwall, Devon, Brittany, the Ardennes, Eifel, Vosges, Taunus, Hunsrück, Harz, Black Forest, Ore Mountains, Giant Mountains and Sudetes.

Almost equally ancient are the Old Plateaux, the Meseta or Spanish plateau, the Central Massif of France, the Russian platform and the ancient plateau of the Aegean. Between the relics of Arctis and the later old mountains lies the Great European Plain which has experienced the tropical jungle climate of the Carboniferous period, the torrid Saharan dryness of Triassic times, the tundra and frozen conditions of the Ice Age. The story of the Mediterranean Sea will be described in a separate chapter, the foundering of large blocks of the earth's crust which led to its formation are associated with the upheaval of the Alpine system, the youngest of the mountains of Europe.

Legacy of Rivers from the Ice Age

The Alpine system is part of the great east-west system of fold mountains which extends across the south of Eurasia from the Pyrenees and Sierra

Nevada to the Himalayas, including within Europe the Alps themselves, the Carpathians, the Balkans and the Caucasus. Within the folds of this sinuous system the Alföld of Hungary and the plain of Lombardy are the youngest land of Europe, hollows filled with the off-scourings of the Alpine chains.

The shape of the Alps was controlled by the earlier mountains, but neither ancient plateaux nor mountains, whether old or young, have been responsible for the drainage system of European rivers and lakes. Most of the rivers are due in origin or direction to the harsh glacial conditions of the Ice Age, and most of them flow across the six orographical divisions outlined above. The Garonne, Guadalquivir, Don and Volga probably owe most to the orographical development of Europe. The Elbe, Oder and Vistula are in part misfit rivers in the older, larger valleys of glacial rivers, the Seine and Loire, Elbe and Rhine cut across the old Armorican mountain system, the Danube crosses the Alpine system between Linz and Bratislava and at the Iron Gates. Most of the lakes lie in hollows in the plateaux or in valleys in the mountains either carved or dammed by glaciers or their deposits. The plateau lakes of Finland and South Sweden are comparable with the lakes of Canada. The lochs of Scotland, the larger Alpine lakes and the tarns of the High Tatra are paralleled in New Zealand and among the Rockies.

Valuable Bodies of Ore

The mineral sequence tin, copper, zinc, silver and lead, the consequence of intrusions of free flowing lavas, occurs in relation to the older rock areas. Tin ores in Cornwall and lead and copper ores in Derbyshire are almost exhausted, but zinc on the edge of the Ardennes in Belgium and copper on the edge of the Meseta or plateau of Spain, and in conjunction with silver in the Harz Mountains, are valuable ore bodies. The more viscous lavas are represented in Europe by the iron ores of North Sweden, North Spain, Luxemburg and

sheep-like goat, for example, of south Russia. The typical evergreens and maquis of the Mediterranean are likewise a product of the seas.

On the coastal margins from time immemorial the dweller has mainly depended for his livelihood on fish food. The domestic harvest became a business, and the fishing industry gradually attained a high position in world commerce and made possible the distribution of this sea product into the remote interior of the continents. Most important of the European marine fisheries are those located in the North Sea and off the Norwegian coast, where fish accumulate in considerable quantity, being probably drawn southwards to these warmer waters from the Arctic Ocean.

Hand in hand with the fisheries goes agriculture. The bulk of the people of Europe is engaged on the land. Land hunger is universal, but nowhere except in Western Europe is the land parcelled out so successfully in smallholdings.

This has been done with outstanding success in Denmark, where a highly-

systematised code of agrarian laws is in force and where a State aided co-operative system is employed in farming.

In Belgium also where the land is apportioned in small quantities five hundred acres is regarded as an exceptionally large estate. The changeable weather, the forest clearings, the necessity for plants and animals of definite breed and of high quality, all forced the Western European to an intensive agriculture which is without parallel in other areas occupied by peoples of European stock.

Add to this natural development the accident that coal and iron occur most extensively in the area where the sea influence is most pronounced and consider that this sea is an open highway across which European pioneers have fared, and out of their gains abroad have enriched the homelands, and so return to the starting point. Europe, by nature, is a peninsula of peninsulas, and whatever in Europe partakes least of this semi-insular environment is to that degree in Europe but not of it.

EUROPE GEOGRAPHICAL SUMMARY

Location 35° N to beyond 70° N at the North Cape, 10° W to 60° E. With the zone of Bordeaux, Marseilles, Genoa, Milan, Belgrade and Bukarest, 40-45° N (Cf. New York, Pittsburg and Salt Lake City). New Zealand is the antipodes of N Spain.

Physical Divisions North-west heights in Scandinavia and Scotland. Fragments of Armorican Mts in Brittany, the Harz, the Ore Mts, etc., the block mts of Middle Europe. Ancient plateaux—the Spanish Meseta, the French Central Massif, the Aegean plateau, and the Russian platform. Great system of east-west fold mts—Sierra Nevada, Pyrenees, Apennines, Alps, Carpathians, Balkans, Caucasus. The Great European Plain crossed by numerous great rivers, many of which are misfits, since they cut across the true grain of the land—e.g., the Thames, Rhine, Elbe, Dnieper.

Climatic Divisions Southern edge of the peninsula, Mediterranean type, with hot dry summers and warm wet winters. Western edge of the peninsula, West European type, a product of the sea, with mainly warm, wet cyclonic westerly winds and rain at all seasons, an area of abnormal winter warmth without floating ice on

the Narrow Seas. The core of the peninsula a transition area where the climate depends upon the play of three great permanent pressure belts, the eastern high pressure, the Azores high pressure, and the Icelandic low pressure. The base of the peninsula in the east, a continental climate of steady sameness, with strongly marked seasons, a monotony of weather in tune with the monotony of the landscape.

Vegetation From north to south tundra (v. Arctic Lands), coniferous forest (v. Finland), deciduous forest (v. Czechoslovakia), steppe grasslands (v. Hungary, Rumania), Mediterranean evergreens (v. Spain, Corsica).

Products About half the world's wheat, oats and barley, and nearly all the rye, with a little maize and rice. A third of the horses and sheep, nearly half the pigs, and about a quarter of the world's cattle. About half the world's sugar supply from the sugar beet. Half the world's coal, iron ore, pig-iron and steel. A large proportion of the world's textile and engineering manufactures. The continent has supplied a more or less continuous stream of human beings for more than two centuries to people the vacant spaces in the New World.

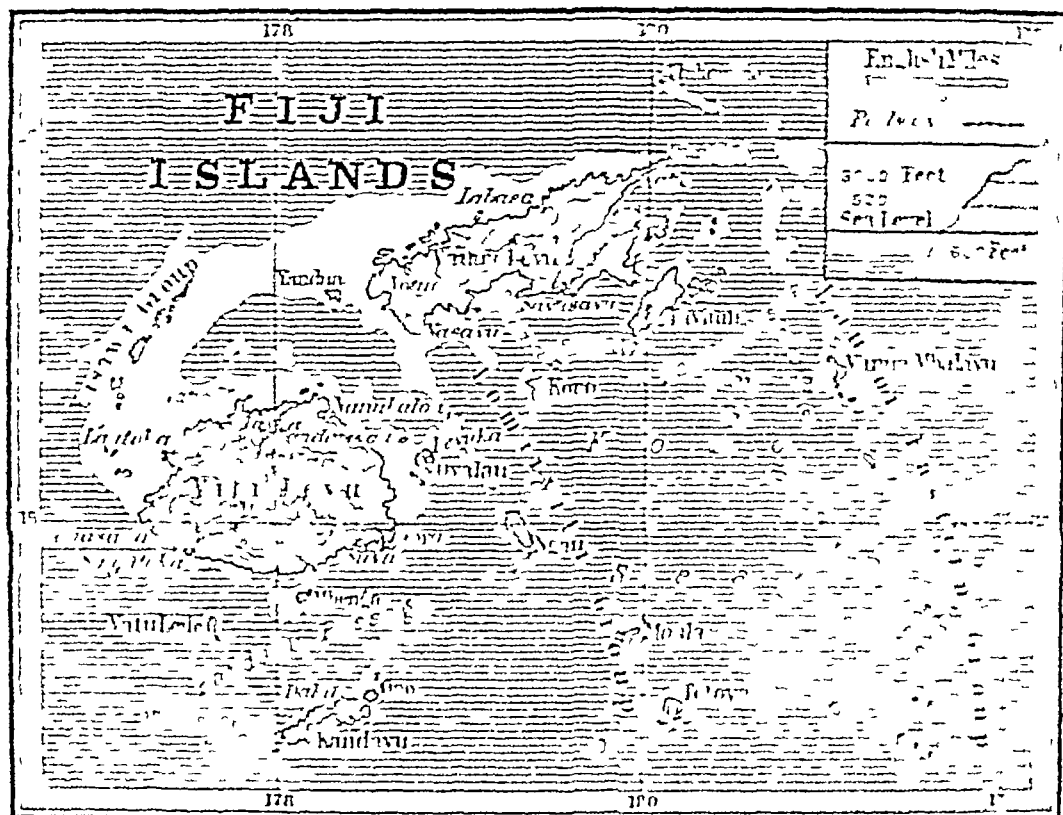
Archipelago Born of Coral and Volcano

by Sir Basil Thomson, F.R.S.

four distinct groups so near together and so distant from other island that they are counted as one. The Lau sub-group extending north and south acts as a natural breakwater on the east side. Immediately to the west is the group of Lomaiviti (Mukile Liji) which includes a number of inhabited islands of no great size. Of the large islands Viti Levu and Vanua Levu (Great Fiji and Great Land) and their lesser neighbours Tavuni and Kandavu Vanua Levu and Tavuni lie upon the meridian and to the westward of these the sub-group Yasawa lying north and

are others in the island of Ngau and I have my first notice of evidence in the upheaved coral island Vatu Lile which is honeycombed with caves that the stalagmitic pillars have been cleanly broken asunder by a sinking of the floor quite recently for the cuts were still clean, showing that there had not been time for the drip of lime water to begin the process of reuniting the massive columns. Earthquake shocks are occasionally felt pumice is washed up on the beaches. The volcanic structure has an important bearing on scenery and fertility.

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LOOKING ACROSS THE HARBOR AT SUVA TOWARDS THE HILLS

THE HARBOR AT SUVA TOWARDS THE HILLS
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 THE HARBOR AT SUVA TOWARDS THE HILLS



Fiji Government

LOADING BANANAS ON THE REWA IN THE ISLAND OF VITI LEVU

For the last few miles of its course to the Koro Sea shallow draught vessels can navigate the river Rewa, and this is of inestimable value to the planters. The bananas are exported in a green state to New Zealand, and boiled green bananas form a part of the staple diet of the natives, together with taro yams and tapioca. The rafts in the photograph are cunningly contrived from bamboo poles.



ON THE REWA NEAR THE SMALL SETTLEMENT OF NAUBORI

PL. QUERCUS

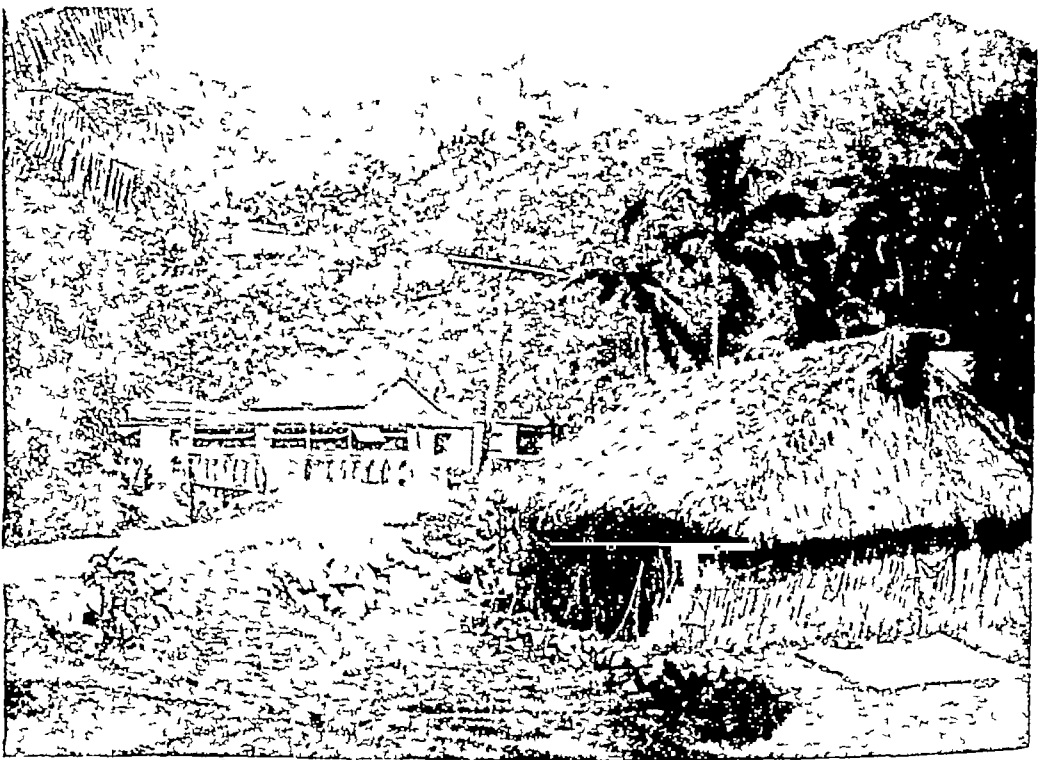
A detailed description of the landscape is provided in the text. The hillside is covered in dense vegetation, including a variety of trees and shrubs. The foreground is a rocky, uneven ground with some low-lying plants. The hillside rises sharply, with a few small, dark, rounded objects (possibly rocks or small trees) visible on its slope. The background is a bright, overexposed sky.

grassy slopes and the wayfarer puts up a myriad grasshoppers which are pursued by black and white shrikes from their perches upon the pandanus trees.

The most valuable of the timber trees are the "dakwa" (*Dammara vitiensis*) and the "vesi" (*Afzelia bijuga*), a hardwood used by the natives for their house-posts and canoes. The "dilo" (*Calophyllum inophyllum*) yields an oil used as a remedy for rheumatism. On the lee side the pandanus and the acacia are plentiful. The natives cultivate the paper mulberry ("masi") for the sake of the bark which is beaten into the semblance of cloth, the coconut, which thrives only near the sea, the breadfruit, plantain and sugar-cane. The lemon, the "wi" (*Spondias dulcis*), the "kakiva" (*Eugenia malaccensis*), the "ivi" (*Inocarpus edulis*) grow wild. The yam and the "dalo," for which irrigation is necessary, are the staple roots and the kava root is grown for the national drink.

Many new plants have been introduced by Europeans. A large area of the deltas is under sugar-cane and China bananas. Orange trees flourish but the fruit remains green when ripe. Cinchona and vanilla thrive when properly cultivated. The coconut is grown in plantations in the windward islands. Tea thrives in the highlands and coffee was grown with success in the early years of the colony. Potatoes grow very well if the seed is imported from New Zealand but will not grow from seed produced in the islands.

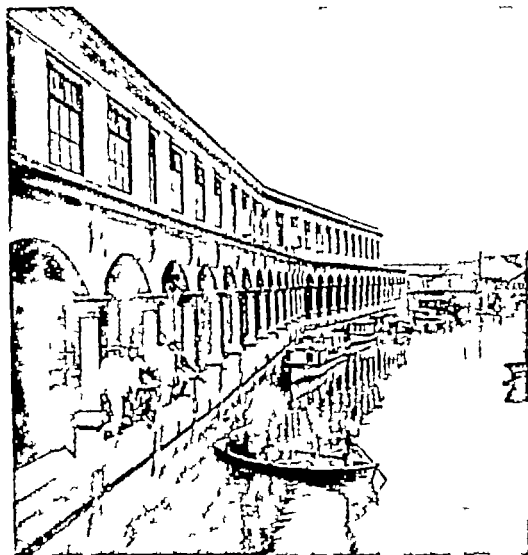
Cattle and sheep do well on the native grass, though it has sometimes happened that the cattle have run wild and become a scourge to the natives, who suffer also from the depredations of their pigs. The planter, even with small capital, may be very prosperous despite hurricanes and disease, the hurricane months are January and March. If a banana plantation is unfortunate enough to lie in the track of the axis of a cyclone the



F. W. Galloway

APPROACHING A VILLAGE ON THE MOUNTAINS BEHIND SUVA

White bungalows of wood and corrugated iron are dotted over the green slopes of the mountains behind the capital. The native dwellings of which the framework is timber and the rest lattice and thatch, are ingeniously constructed with a raised floor covered with mats. There are few roads in Fiji except at Suva and Levuka, and the internal communications are made by water.



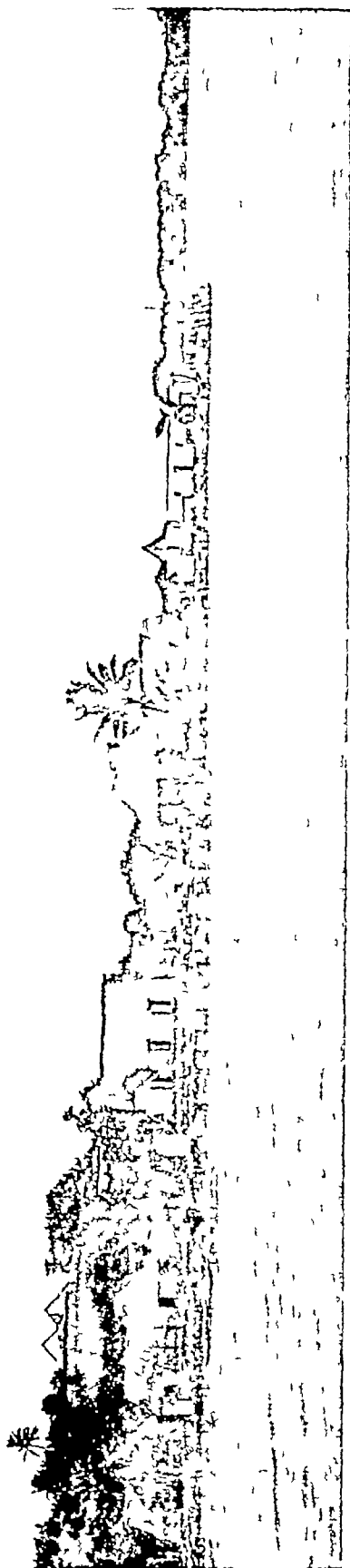
COLONNADE OF THE BUSINESS HOUSES ALONG THE FRONT AT SUVA

Only the most important buildings remain of the old and of some owing to the great power
 incurred in obtaining the materials. Although the height of the hill resident are high but the
 by some excess and continue to the end of the depth of the water here
 the height of the hill of the water here is not so high as

planter may lose his entire crop in a few hours. The trees are stripped bare but recover in a single season.

The only indigenous mammals are rats and several species of bat but the pigs, dogs, cats and domestic fowl must have been introduced in early times. None of the snakes is venomous and besides the centipede and the mosquito the numerous insects are innocuous. Fortunately the mosquito is not infected with malaria. Experiments in acclimatisation are always fraught with danger fortunately the

rabbit has never increased as in Australia but the Norway rat became so destructive to the sugar-cane that the mongoose was imported to reduce the pest. He destroyed the rats but he increased to such an extent that fowl eggs, crabs and at last the sugar-cane itself suffered from his depredations. Among the land crabs is one peculiar to the island of Thikombia that climbs coconut palms to break off the nuts which it smashes open and devours. It is a great delicacy with the natives. In Fiji there is no mining with the



BAU, THE OLD NATIVE CAPITAL OF FIJI ON THE ISLAND OF THE SAME NAME, FROM THE SEA

Bau is situated on a small island at the south east extremity of Viti Levu. The "town" is one of the most striking native villages in Fiji, with irregularly placed houses of all sizes interspersed with unsightly canoe sheds. Here was concentrated the chief political power of native Fiji.

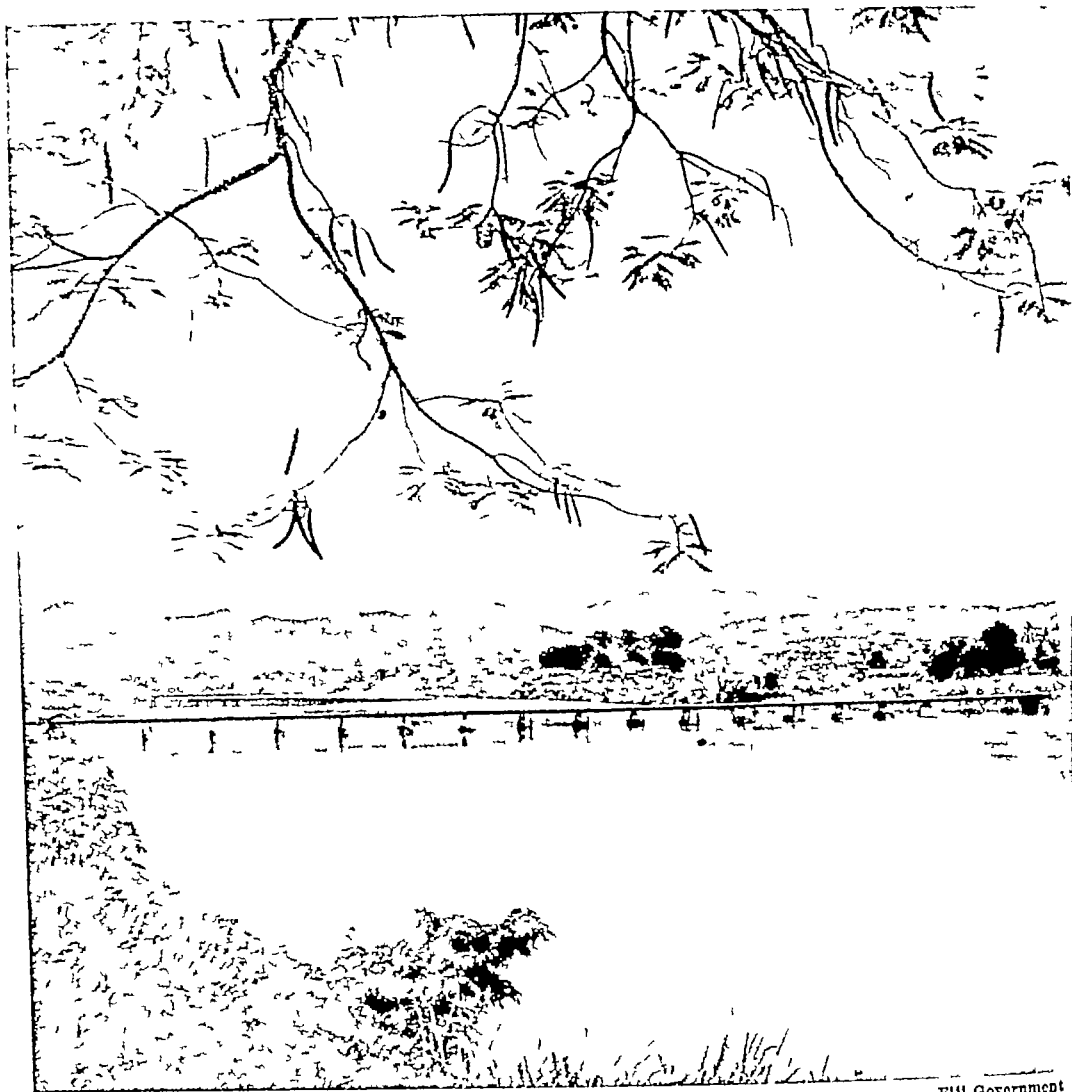
exception of sporadic attempts to prospect for gold. In a rock structure so recent it is unlikely that any important mineral deposit will be discovered.

Fish are abundant, but though the coast natives are expert fishermen there is no commercial fishery. The natives who live near the European towns of Suva and Levuka used to hawk their surplus from house to house but now sell the fish in the municipal market. The staple industry of the colony is tropical agriculture and practically the only manufacture is sugar and its by-products. In 1890 the sugar mills of the Colonial Sugar Refining Company were the largest in the world. At that time the Indian Government still allowed coolie labour to be recruited for contracts in Fiji, and a large number of time-expired Indians settled down in the colony as market-gardeners and shopkeepers. The closing of this source of labour was a severe blow to the industry, for the Fijians, being large landowners, have no inducement to work on plantations. Bananas and pineapples are shipped green by steamer to New Zealand. Copra (dried coconut) is produced by both European and native planters. Generally speaking, it is sun-dried, though a small quantity is dried by the hot-air process. The copra is gathered from the various plantations, collected in Suva and Levuka, and from these ports exported by British steamers which trade regularly at these island ports through the Panama Canal to the United Kingdom and to various continental ports.

There are branches of Australian and New Zealand banks in Suva. The European community numbers only about 4,000 out of a total population of 157,000, of which 85,000 are Fijians and 60,000 are Indians. The native population is increasing slowly.

Fiji is connected with the outer world by cable, radio and weekly steamers to Sydney and Auckland, while ships of the Canadian-Australian Line call at Suva on their way between Vancouver, New Zealand and Australia. The internal





WHERE A SUGAR COMPANY'S RAILWAY BRIDGE SPANS THE BA

Fiji Government

Permanent railways are non-existent in Fiji, except the line owned by the Colonial Sugar Refining Company. Nothing is carried on this railway for a private trader or producer save by the courtesy of the company, which has about 350 miles of permanent line, apart from a number of portable tracks in the cane fields that may be easily and quickly laid as the cutting of the crop requires.

communications still depend upon water transport. Roadmaking lags far behind what is considered necessary in a French colony, and there is no railway beyond the plantation narrow-gauge tracks of the sugar plantations. The earnings of a railway built through so difficult a country could never compete with the slower transport by water.

Levuka, on the island of Ovalau, remained the capital until 1882, when the colony outgrew its inconvenient harbour and confined space. The land behind Suva, the present capital, is sufficient for a large town. There are small European settlements near the large

sugar plantations on the Rewa, the Ba and at Labasa. The houses like those in Suva are wooden bungalows. The native villages are still built of posts and thatch, generally with a small shop kept by a European or an Indian trader.

There is a well-equipped government hospital and medical school for native practitioners in Suva and small local hospitals for plantation labourers. Apart from foreign epidemics the prevailing native diseases, which Europeans sometimes contract, are framboesia, elephantiasis and dysentery, which are infective diseases of the tropics. Leprosy is endemic but not increasing. The Fiji



Fiji Government

BEAUTIFUL PALMS ON THE BEACH OF THE ISLAND OF WAKAYA

Wakaya is only an island about 2 miles east of Ovalau. The coconut palms grow wild on most of the island along the seacoast, but when planted systematically make one of the most beautiful and profitable estates. At the end of the fall they are gathered and cracked open, the kernels scooped out and left to till in to dry. The resulting copra is collected in sacks and exported.



LEVUKA, FORMER CAPITAL OF FIJI ON THE ISLAND OF OVALAU

Levuka was the capital up till 1882, when owing to the growth of the colony and the inconvenient situation of its harbour, the seat of government was removed to Suva, where there was sufficient space for expansion. Practically all the houses in both towns were of one storey and built of timber, but now all the important buildings are being constructed of brick and ferro concrete.

Government has a splendidly conducted leper station on a separate island, all lepers are removed to that island, where they receive the most modern scientific treatment and from which a few patients have already been discharged as cured. The Fijians, who form the bulk of the population, have been very little changed by annexation to the British Empire and conversion to Christianity. They are intensely conservative in dress and custom, and little attempt has been made to teach them English. They are expert boatmen

and most of the larger tribes own a small European vessel in common.

They were never traders, the only form of barter they understood was a ceremonial presentation of goods which looked for a presentation in return, and they have not taken well to foreign commercialism. They are very intelligent, but their needs are small, and though they are large landowners they prefer to lease rather than cultivate their land. Hence most of the small retail trade is passing into the hands of Indians born of coolie immigrants.

FIJI GEOGRAPHICAL SUMMARY

Natural Division Tropical coral-fringed islands, with cores of volcanic origin, the main islands being connected by a submarine ridge (see map).

Climate and Vegetation Controlling factor—the south-east trade wind, which blows from April to November. The hot season, December to March, maximum February, 90° F, is the rainiest, and then the trade wind fails. July and August are the coolest months, 80° F, and the least rainy. Rainfall, generally 100 inches annually, is variable in quantity and season in accordance with the vagaries of the trade wind, the heavy rain comes in typically tropical afternoon downpours. The windward areas, to the south-east, are tropical jungle forest, fringed near the

sea with coconut palms. Leeward districts are grass covered with bare patches.

Products Sugar-cane, copra, rubber, pearl shell and bêche de mer, tobacco, rice, bananas. Sugar-cane is the main product, Indian coolies formerly employed are now prohibited by the Indian Government, and the main sugar firms have ceased operations. Hurricanes may destroy the crop of coconuts. No product has been developed for export purposes to take the place of sugar.

Outlook Fiji is a healthy tropical British colony, without mainland, and with great scenic beauty, situated at a considerable distance from possible markets and without payable resources, a colony in a state of suspended development.

FINLAND & OTHER BALTIC LANDS

Four New Republics on an Inland Sea

by Ernest Young

Author of *Finland the Land of a Thousand Lakes*

As a result of the Russian Revolution and the subsequent disruption of the Russian Empire there emerged a number of independent republics four of which are situated on the eastern shores of the Baltic Sea. These four republics are Finland, Esthonia (the country itself has adopted the spelling Estonia), Latvia and Lithuania. They form a long narrow area which measures roughly about 1,200 miles from north to south but is nowhere more than 400 miles broad.

This long narrow strip is divided into two by the Gulf of Finland, though physically both areas are of the same type of surface configuration. They are low in elevation and while Finland is in the main a plateau of granite the plateau nowhere contains elevations of any importance except in the Lapland portion of northern Finland where the surface reaches heights of 3,000 to 4,000 feet. Esthonia, Latvia and Lithuania are comparatively flat and resemble the rolling prairies of North America in character though there are in places low wooded hills separated by picturesque valleys. As the four republics face the Baltic Sea they have an extensive coastline except in Lithuania which is almost shut off from the sea except for a short stretch round the former German port of Memel.

Island-studded Seaways

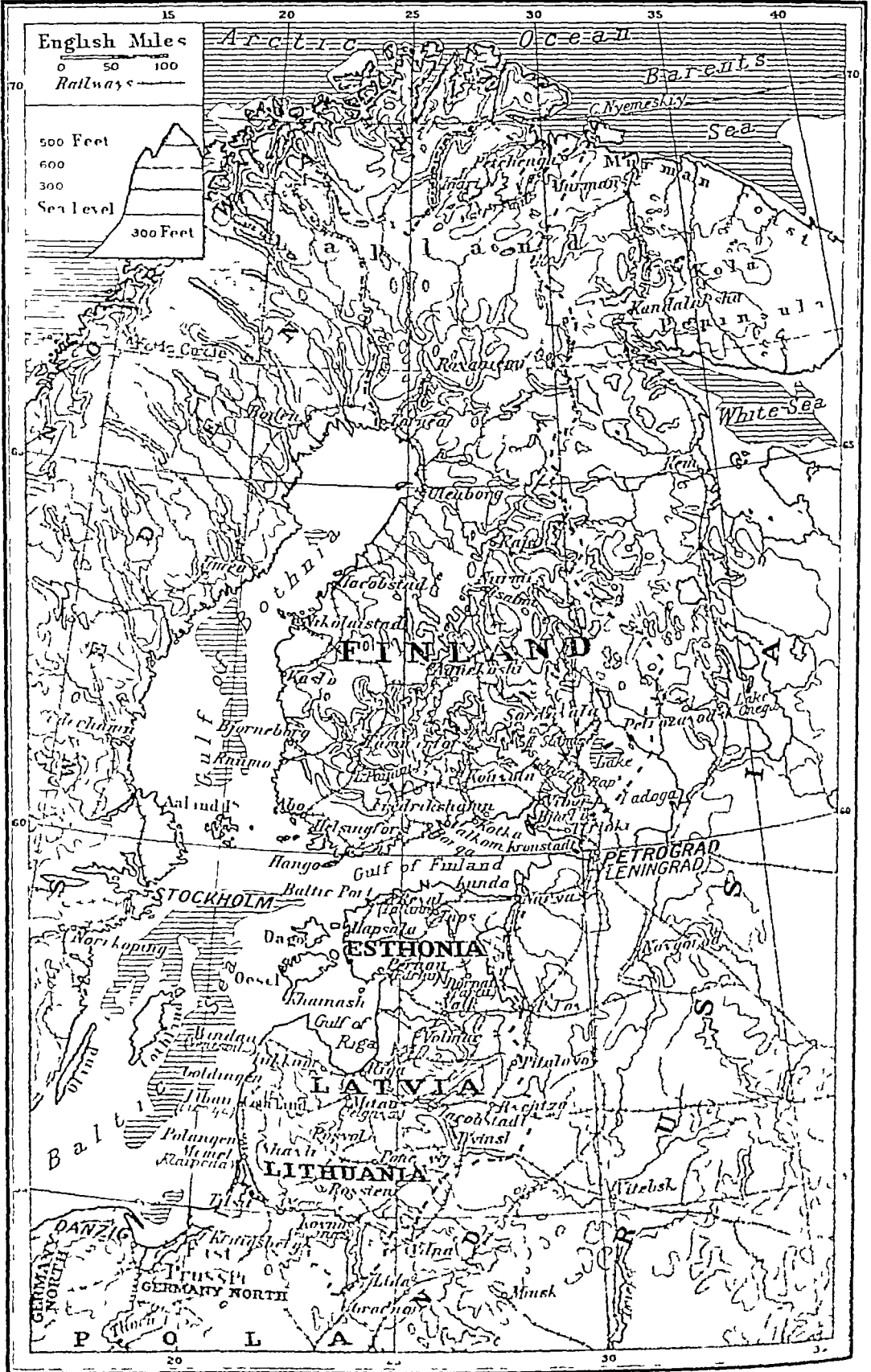
Parts of the Finnish coast are specially noticeable for their off-shore islands: there is probably no part of the earth's surface more dotted with islands than the sea between the Åland Islands and Åbo. These islands are of every conceivable size and shape. Some are large and in the neighbourhood of

Helsingfors dotted with villa residences where people spend the summer months. They are clothed to the water's edge with pine and birch, alder and mountain ash. Others are mere rocks upon which a broad white cross may be painted to assist the navigation of the labyrinth. Across the Gulf of Finland in Esthonia and Latvia the granite rocks give way to sandy beaches and a few large islands nearly convert the Gulf of Riga into a landlocked sea.

Glaciers Lake-makers

The whole area from Lapland to Lithuania forms part of the lake region of north-west Europe. The lakes lie in hollows scooped out by glaciers that covered the surface during the successive Ice Ages or in the valleys dammed by the moraines that the glaciers left behind when they retreated. As the ice remained longer in the north than in the south lakes are more numerous in Finland than in Lithuania: there has been less time for them to be drained away. There still remain however over 2,000 lakes in the most southerly of the republics.

The nearness of the edge of the Finnish plateau to the coast causes the rivers to be broken by rapids not far from the coast and thus unnavigable for any distance from the sea. South of the Gulf of Finland opportunities of river navigation are not much easier. The Dyvina which is one of the keys to the commercial prosperity of Latvia is impeded in its middle course for a distance of about 100 miles by rapids and shoals where the river forces its way through the low sandstone hills, and small steam vessels can go inland only about twenty miles. The middle



EASTERN COAST OF THE BALTIC AND ITS GLACIER-WORN HINTERLAND

and upper courses of the river however for about 100 miles beyond the frontier of Latvia, are used for floating timber in the spring floods. The Niemen (Memel) is navigable below Kovno (Kaunas) but between Grodno and Kovno is only available for rafting timber and all traffic ceases on account of ice for about three months each year. Owing to the lowness of their watersheds and the number of tributaries both the Dvina and the Niemen have been connected by canals with the Dnieper and thus with the Black Sea.

The glaciation of the surface removed most of the fertile soil and left numerous marshes and peat bogs. As the south has been longest free from ice there have been longer opportunities for drainage and cultivation and the soil of Lithuania is therefore richer than that of most of the other states.

Though the north of Lapland is well beyond the Arctic Circle and the south of Lithuania is in about the same latitude as south-east England the

differences in climate are not so great as one would naturally expect. Winters are everywhere long and severe though the south is in general warmer than the north. The Baltic freezes and navigation during the winter is only possible with the assistance of ice-breakers. By this means both Reval (Tallinn) and Hango maintain a regular winter steamer service with England. The Latvian ports of Windau (Ventspils) and Libau (Liepāja) are however ice-free all the year round and maintain continuous and regular services with England and America. The port of Riga is usually ice-bound for about four weeks but can be kept open with the assistance of ice-breakers.

Spring is a season of enchantment the prelude to a short but magic summer when the heat is intense and raspberries and strawberries grow wild over hundreds of square miles.

The forest plays an important part in the life of the people. From the birch are obtained wood for the making



IN THE SOUTH HARBOUR OF HELSINGFORS, CAPITAL OF FINLAND
Helsingfors harbour is divided into the north and south harbours by the small peninsula of Skatadden, on which stands the lovely Greek Catholic Church whose white roof, crowned by gilded cupolas, are seen in the right background. West of it the five-domed Lutheran Church rises above the town, while on a miniature island in the foreground is the Natch Cl. b. much frequented building.

of bobbins for the thread factories of Paisley, bark for drinking cups, shoes and baskets, fuel for engines of trains and steamers and wood for cart wheels and spinning wheels. Other trees supply timber for building and furniture, and for the manufacture of paper, paper-pulp and cardboard, and resin and tar. Timber is the most important export of all the four republics.

Ingenious Drying of Crops

At times the summers may be too short for the ripening of grain or the harvest-time too wet to allow the sheaves to dry. In such cases drying may be carried out in pine-wood buildings heated by birchwood fires, this process also kills insect pests and thus improves the quality of the seed so that in most rye-growing countries Finnish rye for seed is in great demand. In Esthonia and Lithuania potatoes are an important crop. They are grown to such an extent both for food and as a source of alcohol that Esthonia has been called "the Potato Republic," and a distillery is a part of the normal equipment of every typical Esthonian estate. In Lithuania special efforts are being made to develop dairy and poultry farming, already the egg export has reached 100,000,000 a year.

The sea offers another source of food, and there is a great deal of sea-fishing, both in the Gulfs of Finland and Riga and in the Baltic. The social results of fishing as an occupation are important, the risks compel immediate obedience to a captain, demand a common toil for a common end, and result in sharing rights. The rivers and lakes abound in fresh-water fish, and Finland vies with Norway as an anglers' paradise.

Vast Sources of Water power

Unfortunately, useful minerals are everywhere rather scarce. Finland has no mineral of any consequence except granite. Coal occurs in Lithuania, but its quality is poor and the seams are far below the surface, and there are

unworked deposits of lignite and bog-iron in Latvia. Esthonia is a little more fortunate in possessing large deposits of shale, rich enough in crude oil to yield sixty gallons a ton. This shale is used as a substitute for coal, especially in distilleries, gas factories, locomotives and steamships. In the cement industry it functions both as fuel and ingredient.

Amber is found in both Latvia and Lithuania. It occurs on the coast in regular strata in small sand-hills, and also in isolated lumps that have been thrown ashore by storms.

The general absence of coal and iron means that manufactures are not, on the whole, well developed, though the utilisation of water power both directly and electrically transmitted, has in Finland, as may elsewhere be the case, given rise to important industries. It is estimated that the Imatra rapids in Finland are equal to 140,000 horse-power, while the Narva rapids in Esthonia may develop 60,000 horse-power, and when the Latvian government scheme for the water-power of the Dvina is realized, it is estimated that it will develop 350,000 horse-power.

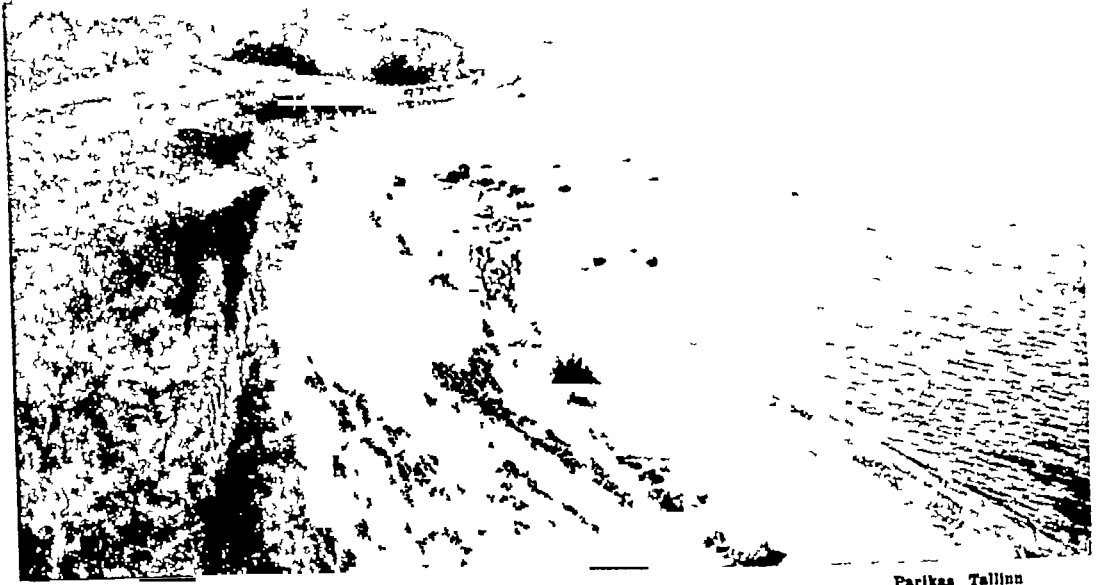
Local Raw Materials

Such manufactures as exist are mostly concerned with local raw materials. Thus timber becomes cellulose, paper-pulp and paper, flax becomes linen and its seeds give linseed oil, the fine sheep of Latvia are the source of a small amount of wool, while alcohol is made from potatoes, and beer and flour from barley. There are, however, cotton factories in Finland and at Narva in Esthonia, at the latter place cotton was formerly manufactured chiefly for the Russian market.

As many of the people were practically self-supporting and frequently had little surplus, good roads were scarce or non-existent. The land was too thinly populated and too poor to call for or to provide numerous means of internal communication. Stations or post-houses occur at more or less regular intervals, where the traveller has the right to



FINLAND *Adorning the countryside are countless lakes fringed by fertile valleys alternating with granite rocks rising to 200 feet*



Parikka Tallinn

Precipitous cliffs and wooded headlands overshadow the numerous small bays and coves which add wild beauty to the North Esthonian coast



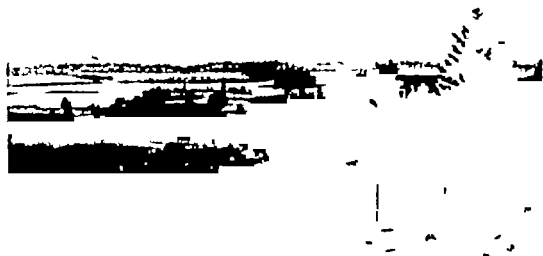
Parikka Tallinn

ESTHONIA *Some fifteen miles due east of Reval is this magnificent perpendicular descent of foam-flecked water known as the Jagala Falls*



Further Telling

Secluded spots of great beauty prevail on the Esthonian coast the ruggedness of which prohibits in many parts human habitation



Further Telling

ESTHONIA About thirty per cent of the country is covered with forest, and each fair landscape has a share of the luxuriant woodlands



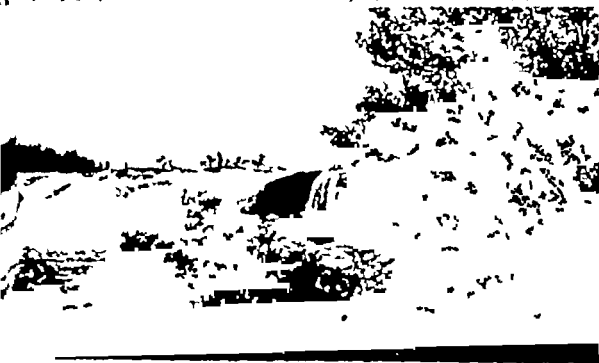
FINLAND—Panorama of the town of Helsingfors and the harbour, which is almost completely landlocked by the skerries and larger islands which fringe the coast.



FINLAND—Frequent rapids, which supply power for numerous mills, occur on the rivers, and the river Pajank, or Pajank, is not an exception.



Clearly outlined against the sky in the centre of the photograph is seen the finely proportioned Lutheran church raised up upon a huge mass of granite



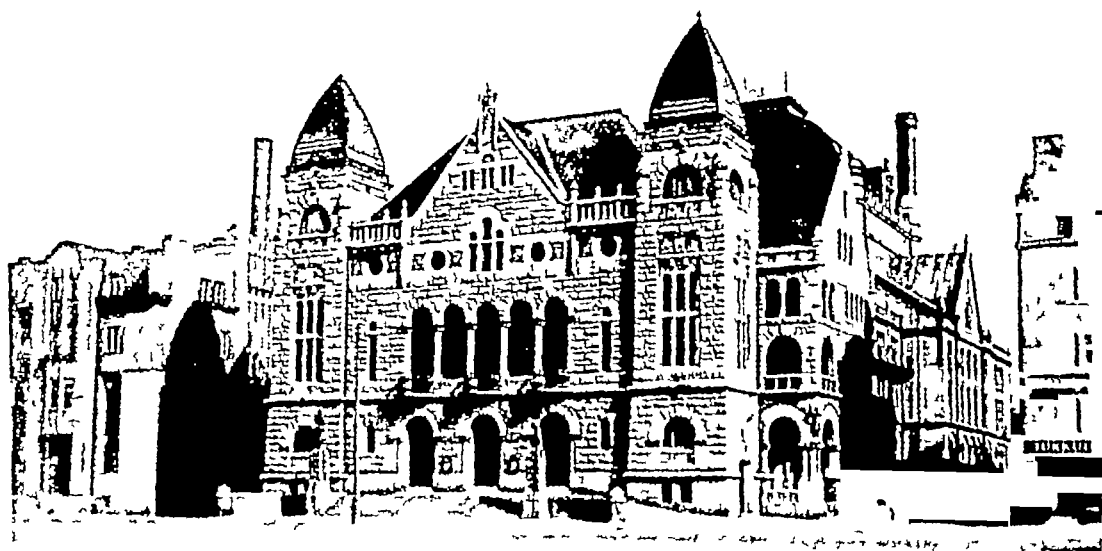
Flowing from the islet studded Lake Inari during the greater part of its course to the Barents Sea it forms the frontier between Norway and Russia



FINLAND Rising in Lapland the Kemi, after a course of some 300 miles, empties into the Gulf of Bothnia, this scene depicts its majestic sweep past Rovaniemi, where from the north descend into it the waters of the Ounas



ESTHONIA Oil shale in rich quality is plentiful in certain parts of the country and at the hokila quarries seen above the oil is present in sufficiently large quantities to make its extraction commercially profitable



E N A

This fine building with its granite façade is the National Theatre at Helsingfors, standing in the Jernvågs-Torg or Railway Square



E N A

FINLAND In the Vestra Chaussée close to Helsingfors Station is the splendid National Museum with its lofty tower, built by Saarinen

demand transport at fixed rates. The inconvenience caused by the absence of really good land roads is to a large extent mitigated by the abundance of water routes provided by the lakes, though their value is much discounted by the fact that they are frozen over for three or four months every year. Most of the Baltic river is useless except for floating timber. All who have ever travelled in the boats that navigate the Finnish lakes are unanimous as to the quality of the accommodation, the cheapness of the fares and the excellence of the food obtainable on board the little craft.

On Lake Saima vessels can travel for a distance of 50 miles and it is possible to go from Viipuri on the Gulf of Finland to Helsinki in the very best of the country in a like time. A light boat winds its way in and out among rocks and islands and streams of water through channels marked with floating buoys, white poles, red flags or whitewashed cairns, there passes in one long ever-changing panorama much that is typical of Finnish life and scenery. The speed is low for the journey is numerous, and it would be a pity not to act on the national maxim

God did not create hurry.

Causes of Scattered Population

Railways are comparatively few; they connect mainly the few ports with each other or with certain sources of supply in the interior. Considerable areas are very badly supplied with single lines and narrow gauges only emphasise the deficiencies. Moreover the former Russian government was more concerned with military than economic railways so that where railways exist they do not always serve the economic needs of the countries they traverse. This is particularly the case south of the Gulf of Finland. In Finland the railways were built by Finns without aid from Russia and therefore with no regard to strategic interests.

The presence of forest and farm and the absence of roads and railways are

all against dense settlement and large cities. The only city with over 100,000 inhabitants is Helsingfors and only two others, Viipuri and Rovaniemi, over 100,000.

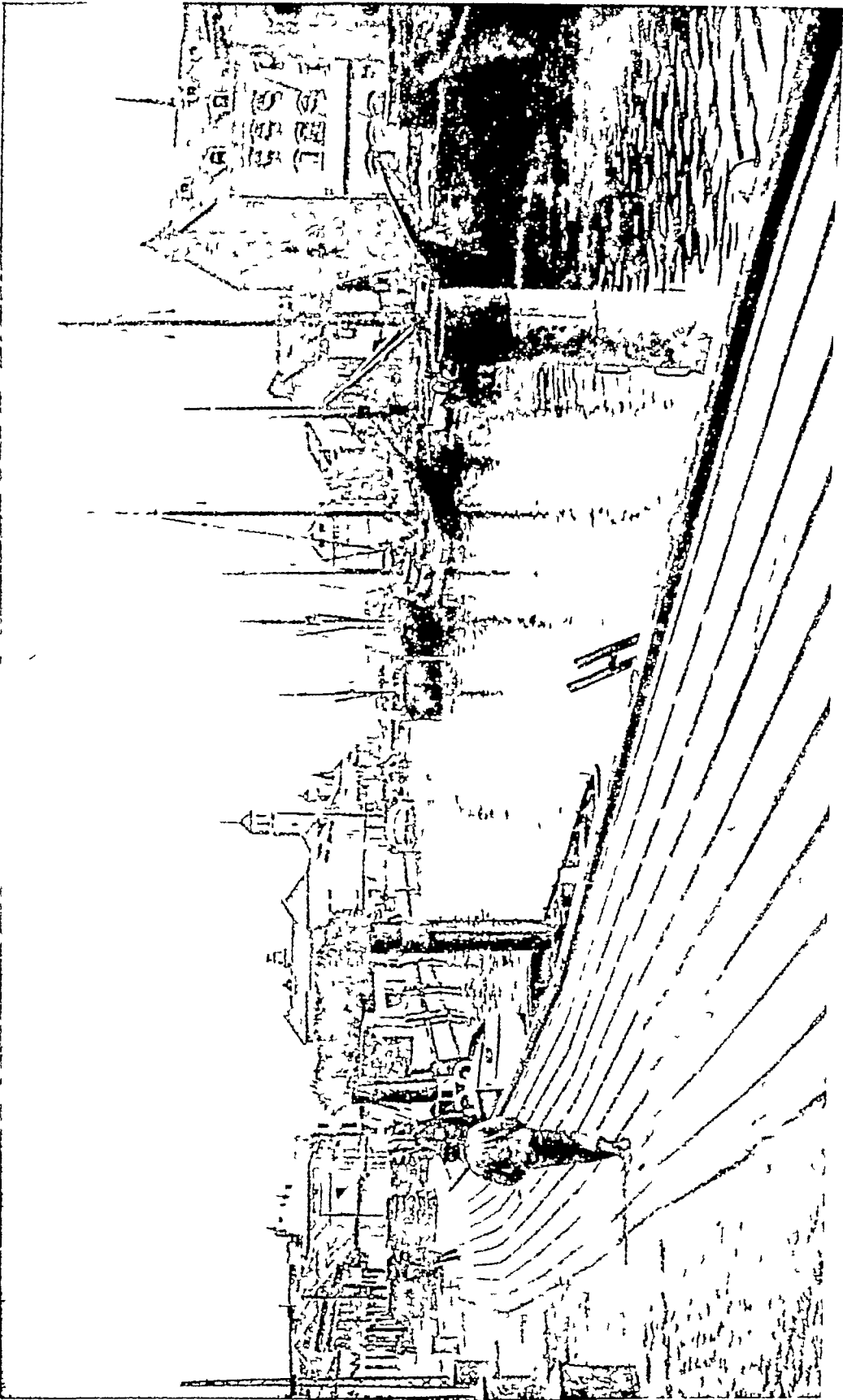
The houses vary somewhat in style and material according to their urban or rural character. In the country as is natural in a forested region, houses, barns and farm buildings are of wood and bone make. The peasant is helpful with his hand and quite capable of erecting his own house and making his own furniture. The houses are small and usually only one story high and the plank between the logs and planks is filled with clay. Roofs are fairly high and steep to throw off snow and are covered with plank, thatch of straw or with birch twigs which under the influence of the weather take on the appearance of slate.

Architecture Old and New

In the towns brick and stone are used in the better buildings. The architecture of the different structures may be a mere repetition of classical or Renaissance form or modelled on the buildings common in the homeland of the farmers who have controlled these territories in recent years. Helsingfors in Finland has a Lutheran church and a Danish church, but no German houses. Finland has Swedish castles. But there has sprung up all round the Baltic a new school of architecture that has given rise to some building of a curious and often beautiful character. These are best seen in a city like Helsingfors where there has been a more actively independent culture than elsewhere.

Striking Decorative Schemes

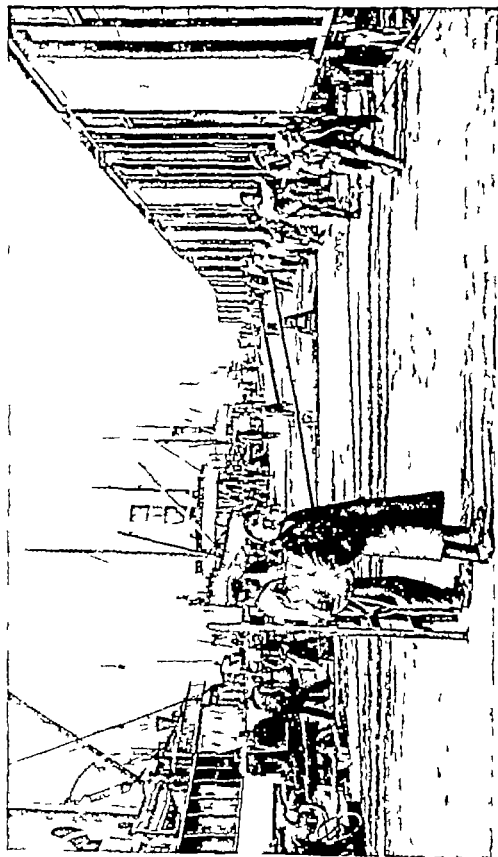
Modern Finnish architecture is a fascinating study because no two people have the same idea as to what it is worth or what it all means. Straight lines are broken up in the most extraordinary manner, decorative details of frogs and spiders, carrots and swans are strewn about with a recklessness and profusion that is sometimes comical but sometimes impressive.



Lithuanian Legation

ALONGSIDE THE RIVER DANGE IN KLAIPEDA (MEMEL), SEA OUTLET FOR THE TRADE OF THE LITHUANIAN REPUBLIC

The town, seaport and territory of Memel on the Baltic was detached from Germany by the Treaty of Versailles, to be placed under the control of the Conference of Ambassadors, and was handed over by them to Lithuania on February 16, 1923. The population of the Memel territory is given approximately at 138,000, while that of the town, officially known by the Lithuanians as Klaipeda, situated at the north entrance to the Kurisches Hafl is about 32,000. Though possessing many modern buildings, Memel is old, having been founded by the Teutonic Order in 1252, it exports timber, grain and fish, and has several important industries.



CHARACTERISTIC SCENE ON THE QUAY OF LIBAU ONE OF LATVIA'S FLOURISHING SEAPORTS

Libau, locally known as Liepāja, seaport of Latvia, is in Courland, and lies near the coast where the lake of Libau discharges its waters into the Baltic Sea through the commercial harbour channel dug in 1703. It has an excellent harbour which is free from ice all the year round. Among the chief exports are flax, timber, cereals, spirits, petroleum and oil-cakes, while the commercial activity of the town is illustrated in the several iron foundries and factories. The good sandy beach, well kept pleasure ground and the famous sulphur springs in the neighbourhood has made Libau a favourite seaside resort.

As movement was easiest along the sea, the sea road was in many ways the main road and almost all of the larger cities are on the coast. Of these one of the most attractive is Helsingfors, the capital of Finland, which possesses a fine double deep-water harbour protected by the island of Sveaborg. Its two chief features are cleanliness and youth. There is in the market square a fountain whose design comprises the figure of a young girl, beautiful and fresh as the morning, rising out of the sea, the figure symbolises the modern capital.

The old capital was Åbo, occupying a fine strategic position behind the Åland islands. Åbo is still properly the ecclesiastical capital as being the spot where the first Christian missionary (an Englishman, and sent by the only Englishman who ever ruled at Rome) landed in the twelfth century. Reval (Tallinn), the capital and chief port of Esthonia, being farther south than the Finnish ports, has the advantage of being practically free from ice. In its deep harbour merchants of the Hanseatic League gathered at an early date under the shelter of the castle-crowned crag. It owed something of its former prosperity to its nearness to Petrograd (later Leningrad).

More important as a port is Riga, the capital of Latvia. It was once a member of the Hanseatic League and the old high granaries and huge cellars still bear witness to its early value as a storehouse.

By river and canal it has easy communication with the basins of the Dnieper and the Volga, and railways tend to centre here because of its eleven months of open water. Before the Great War Riga was the second largest city on the Baltic, Petrograd being the first, and, with its 612,000 inhabitants, was larger than Stockholm. During the Great War the population decreased, but now is again over 300,000.

Memel (Klaipėda) is a small place, but as the chief port of Lithuania, with an approach blocked by ice for only fourteen days in the year and fairly easy access to the interior, it should have a much increased population and trade in the early future. The one big inland city was Vilna, the capital of old Lithuania, now included in Polish territory, and the seat of a famous university. It lies at the junction of the route from Petrograd (Leningrad) to Warsaw and beyond with the route from Danzig to Moscow. Hence it is naturally an important railway and commercial centre. Kovno, the modern capital, stands on the right bank of the Niemen 60 miles north-west of Vilna. Its former industries in timber and grain have given place to brewing and nail and wire making. It has railway communication with Vilna, Dvinsk and Königsberg.

The people are largely the product of the hard conditions under which they live—simple, honest, self-respecting and firm, tenacious—even obstinate.

FINLAND GEOGRAPHICAL SUMMARY

Natural Divisions Superficially the whole area is a lakeland, consisting of lowlands and low plateaux with lake-filled hollows. Structurally the Gulf of Finland is a definite gap, with the northern area, Finland, an area of old rock, a relic of the ancient continent of Arctis and similar in origin to Scandinavia and Scotland, and with the southern area, the Baltic republics, an area of newer rock, part of the Great European Plain, allied to the similar lands along the Baltic shores of Germany.

Climate An area of continental uniformity, held in leash by the Baltic waters. Hard winters, with frozen lakes, rivers and seas, recall Labrador. Cool summers, with spells of brilliant sunshine, recall Quebec or Lapland or Arctic Lands.

Vegetation Naturally, a forest mainly coniferous, part of the great belt of forest which extends from Sweden to the Amur lowlands. Pasture and arable land find place in the forest clearings.

Products Timber, with all the by-products, pulp and paper, turpentine and resin, potatoes and alcohol, rye and other hardy cereals, dairy produce and eggs, flax and hemp.

Communications Waterways in summer, primitive roads, railways designed in the south to serve alien interests before the advent of independence.

Outlook With Switzerland and Denmark as exemplars these newly-freed peoples are entering upon a period of golden opportunity.

FORMOSA

Japan's Island Colony in the Pacific

by Owen Rutter

Author of *Through Formosa, etc.*

FORMOSA or Taiwan the Island colony of the Japanese Empire, is, as it were a stepping stone between Japan and the Philippines and lies where the Pacific Ocean becomes merged in the China Sea. It has an area of 13,944 square miles—nearly twice the size of Wales—and is shaped something like a great plum 241 miles long and 76 broad the southern peninsula forming the stalk.

The formation of the island is so peculiar that the Chinese geographers of old believed it to have been caused by dragons ploughing up the earth under the sea. Through the centre from north to south runs a continuous mountain range the outstanding peak of which is Mount Morrison or Nittaka (14,777 feet) the highest mountain in the Japanese Empire. This range divides the island into two distinct parts. Its spurs run east and west on the east they form a region of highlands which fall steeply to the coast in some places forming rocky cliffs which tower sheer 6,000 feet above the sea while on the west the mountains slope gently into lesser hills, and thence to plateaux and fertile plains. The result of this formation is that there are no natural harbours of any importance on the east coast and no navigable rivers. On the west and north the conditions are more favourable.

* Beautiful Isle of the Portuguese

The Japanese have improved by artificial means the harbours of Takow and Keelung although the Tamsui is the only river navigable by steamers for any distance. It was the sight of these smiling plains and placid streams, with the hills rising in the background, that caused the early Portuguese

navigators to call the island *Ilha Formosa*—the Beautiful Isle—as they sailed past the western shores.

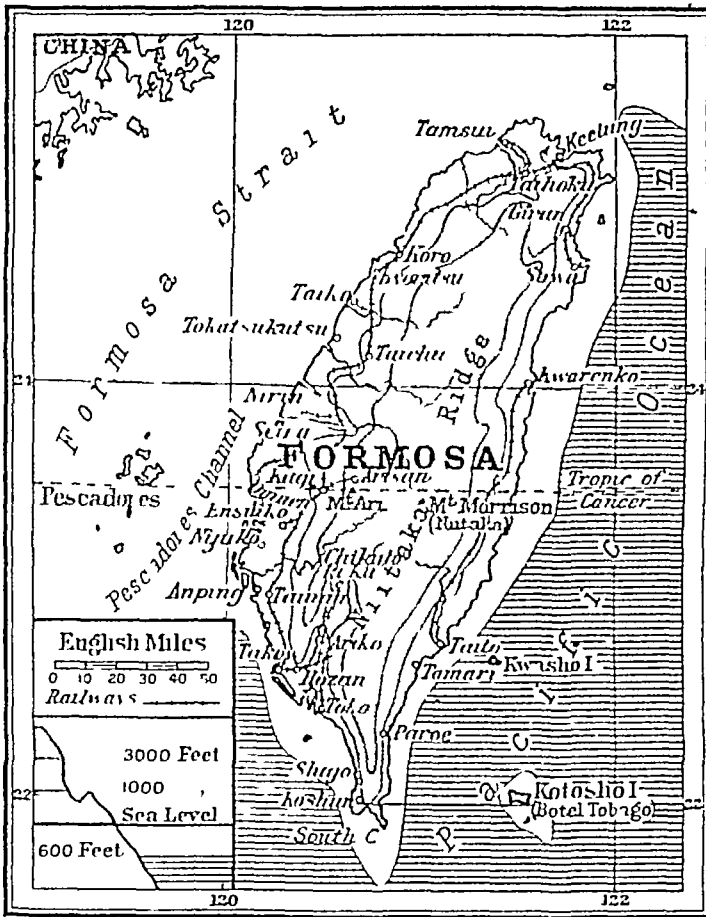
The plains too have been rendered fertile by the washings from the hills and contain extensive alluvial deposits of considerable depth and since Formosa is the centre of a volcanic chain the soil throughout is unusually rich.

Climate Warm and Damp

The tropic of Cancer almost bisects the island and the Japan Stream washes its eastern shores. In the south the climate is subtropical but in the north and eastern hills the climate is colder but snow is rarely seen, except on the mountain peaks in winter. The rainfall is well distributed throughout the year with showers during the summer months, though Keelung is one of the wettest places in the whole world and Formosa Strait is subject to terrific storms. The climate is a healthy one both for the white man and the Japanese though malaria is not unknown, but the southern part of the island is pleasanter from October to April during the north-east monsoon while the climate of the north is better during the south west.

The warm damp climate naturally resulted in the island being clad originally with luxuriant forest much of this fell before the Chinese settlers but much still remains upon the eastern hills. It contains many species of commercial timber most valuable of which are the oak, cypress cedar and camphor laurel.

In the forest regions of the east the larger mammals of the island are mainly found. Some of these, such as the Tibetan bear (*Ursus tibetanus*) are allied to species found in the Himalayas or northern China others such as the



RIDGE UPHEAVED FROM THE CHINA SEA

pangolin or scaly ant-eater, to those of the Malayan islands. Wild pig and deer abound, while the clouded tiger (*Felis nebulosa*), the flying squirrel, several species of civet-cats and the goat-antelope also occur. Snakes are common, and there are many species of birds—thrushes, starlings, woodpeckers, pigeons, partridges, pheasants, owls and others—several related to birds living in lands far distant, others peculiar to the island.

On the west there is little natural vegetation for nearly every acre is under cultivation. The first agriculturists in Formosa were the Chinese. They brought rice seeds with them and their methods of cultivation were so successful that the island became known as the granary of China, and now the western plains have mile after mile of terraced rice fields which provide an annual crop of 40,000 tons. Half of this goes to feed the local population and the remainder

is exported to Japan and foreign countries. The Formosan farmer has always had conditions in his favour, so his methods are still primitive and he takes little pains to put back into the soil what he takes from it, but by means of extensive irrigation works the Japanese authorities have increased the annual output of rice, improving its quality at the same time.

Up-to-date methods have also improved considerably the cultivation of sugar which is one of the most flourishing forms of agriculture in the colony, much has been done by obtaining from the Hawaiian Islands cuttings of cane which gave not only a greater yield per acre than those introduced by the Chinese, but also a considerably

higher yield of sugar per ton of cane. As well as rice and sugar the Japanese found tea in the island, also introduced from China. Both soil and climate suit the plant well, and it is cultivated extensively in the plateaux to the north, drains and terraces being constructed on the hill slopes to prevent the fertile top-soil from being washed away.

Formosa is situated too far north for coconut trees to bear well, although they thrive on the little island of Kotosho or Botel Tobago, a few miles off South Cape. The tapioca plant, the areca-nut and the silk cotton tree also grow in the south. Tobacco is cultivated by both the Formosan Chinese and the aborigines, also ground-nuts and the soya bean, harvests being obtained twice a year in the central and southern districts. There are unlimited possibilities for sisal hemp and such fibres as jute and ramie, while pineapples and bananas abound.

In fact both soil and climate are so favourable that the island will grow almost any tropical and subtropical product. Its possibilities have not been fully exploited and the authorities by establishing experimental gardens have proved that coffee many new fruit trees and even American grapes will grow. They have also introduced fertilisers and labour saving devices and by practical example have gradually induced the conservative Chinese to adopt scientific methods of agriculture.

The most important minerals in Formosa are gold, silver, copper, coal, petroleum and sulphur. Most of these occur in the northern part of the island. Gold is obtained by washing the alluvial deposits of the rivers and by mining

quartz. Silver is produced in unimportant quantities, while copper has been found in close proximity to the gold deposits. Coal is more widely distributed, even being found in the Pescadores Islands, whose total area is only 44 square miles off the west coast, although the northern outcrops have so far proved the most valuable. Several sulphur pits exist in the north, while indications of petroleum have been found in several parts of the island but have not been worked extensively.

Indeed, so little explored is the eastern territory that it is difficult to estimate Formosa's whole mineral wealth. The future seems to hold great possibilities. The rivers on the east coast are known to carry gold, and in the mountains



TRAMLINES FOR MAN-POWER ON THE ISLAND OF FORMOSA

Though narrow tracks have been laid across the rice fields of the still savage back-country, man power is employed as being cheaper than steam. The climate is favourable for the cultivation of rice, especially in the western districts where a crop is gathered twice yearly. The government has established a rice inspection office and estates where rice seed is cultivated experimentally.



CRENELLATED PEAKS DIMLY SEEN BEYOND GRACEFUL BAMBOOS

In Formosa, as throughout the Orient, the bamboo figures extensively in the social economy of the people. Were every other means of support, except bamboo and rice, to fail, these two plants would supply the necessities of existence. Houses, agricultural implements and many domestic utensils are principally fashioned out of bamboo while the green shoots are prized for food

from which they run may be hidden parent reefs more valuable than any that have yet been found. It seems probable that when the unexplored part of the island is sufficiently opened up for adequate mineralogical surveys to be made other valuable minerals may be discovered.

If the hills of the east coast hold hidden treasure, the seas that wash its

shores are already productive, for they afford a livelihood to numerous fishermen and teem with bonitos, tunnies and frigate mackerel, while in the western waters are found sea-bream, grey mullet and rorquals. The Japanese, by instituting motor-driven fishing-boats, have caused remarkable progress to be made in the fishing industry, for the primitive Formosan craft are little more than



WHERE TREE AND CREEPER STRUGGLE IN A FORMOSA FOREST

hunted rats with ear and a small seal. Beasts and wild game form the bulk of the catches and the supply for local needs are exported both fresh and dried to Japan. In great quantities, wild ducks find a delicacy to the Chinese palate are also important.

The timber workers occupy a considerable proportion of the population. Kapi which stand on a plain at the

foot of the slopes of Mount An is the centre of the lumber industry. The timber is worked at elevation which vary between 1,000 and 8,000 feet and transported by means of a mountain railway, the sawmill which is equipped with the latest American machinery. Cedar is the timber chiefly worked, the camphor tree is reserved for the deposits with which its wood is impregnated.

the collectors' work being one of great difficulty and danger owing to the truculence of the aborigines in whose territory much of the camphor lies

The main occupation of the Chinese Formosans who form the bulk of the population is, however, agriculture. From the earliest times the soil has afforded them their chief means of livelihood. They brought their methods of rice cultivation with them from

of the soil. They also plant sugar and tea and their domestic animals are water-buffaloes and pigs.

Most of the mining is in the hands of the Chinese Formosans, though the large enterprises are financed by Japanese capital, only Japanese subjects being allowed to engage in the industry.

Very much the same state of affairs exists in the manufactures: the Chinese Formosan is the labourer, the Japanese

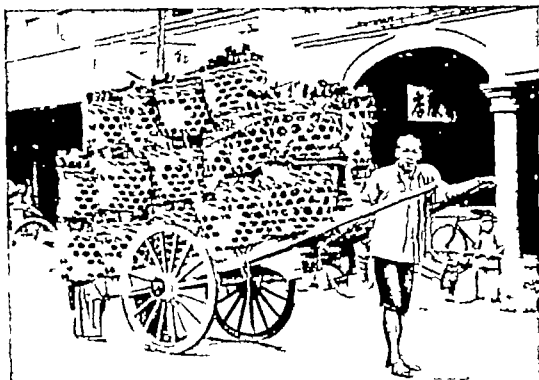


AMID THE LOVELY GROVES THAT AROUND NEAR TAIHOKU

Two cactus hedges gay with convolvulus, fuchsia and many other wild flowers border the lanes. Their blossoms stand out brilliantly against the green background, while overhead the bamboo rears its stately plumes and throws a grateful shade across the path. The slender stems nod to every wayward wind, letting fitful gleams of sunshine play upon the flowers and foliage beneath.

China, ploughing the inundated fields with the aid of their water-buffaloes and planting out the young shoots from the nurseries by hand, the women working as hard as—perhaps harder than—the men. The holdings rarely exceed two and a half acres, but in the southern districts they are made to yield three crops a year and in the north two—a proof of the farmers' industry no less than of the fertility

the master. The chief manufactures are those of sugar and camphor. There are some forty-five sugar refineries with up-to-date machinery, all owned by private companies. Camphor, on the other hand, is a government monopoly, with a central factory at Taihoku, the capital. The camphor is obtained in the first place by chipping small pieces from the trunk in the forest. The chips are heated in small stoves



Ewing Galloway

STREET IN TAIHOKU, THE CAPITAL OF FORMOSA

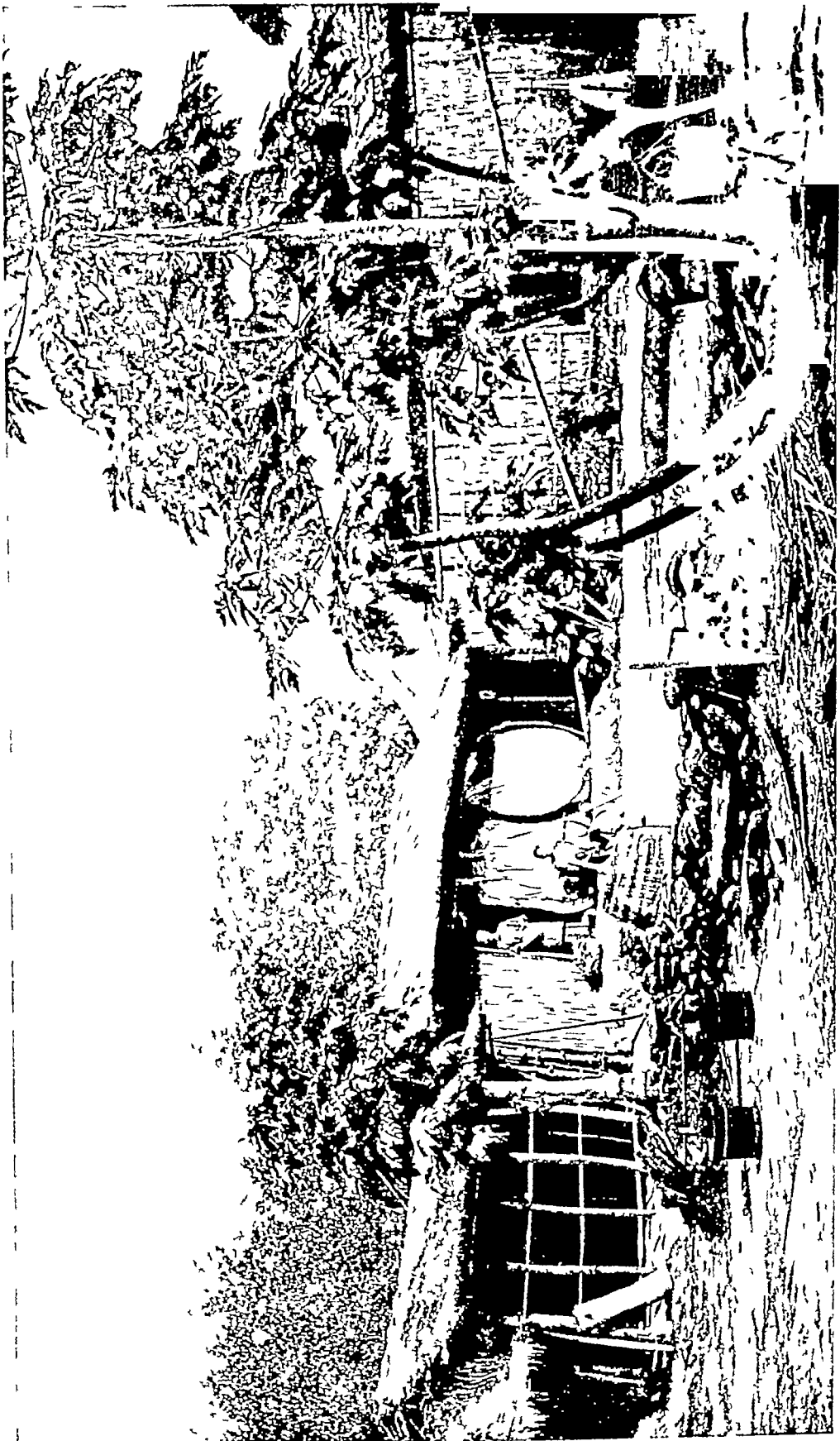
Taihoku covers of about 5 square miles, with population of 174,000. The city is situated on the Tamsui river and formerly consisted of three districts, but these together with the surrounding villages have been united under Great Taihoku. The city contains all the leading government institutions, and in the camellia factory large proportion of the world supply is prepared.



Ewing Galloway

CUTTING UP CAMPHOR WOOD AT A FORMOSAN DISTILLERY

Here the wood is being cut off in flakes, before being heated to extract the camphor. After being in the hands of individuals for number of years, the industry became a government monopoly and has made steady progress, this being partly due to the growth of the celluloid industry and partly owing to the Monopoly Bureau scheme of cultivation.



THREE-SIDED HOUSE IN A PEOHWAN VILLAGE ON THE SOUTH-WEST PORTION OF THE ISLAND

Clean, well arranged and comfortable, the houses of the Peohwans form three sides of a square, of which the portion in the rear is occupied by the family, while the two wings are used for sheltering cattle, pigs and poultry. The whole structure is made of bamboo, the thatch which covers the roof being bamboo leaves. The furniture consists of a few bamboo articles of Chinese workmanship, while rough billets of wood serve as chairs. The tree on the right of the picture is a papaya, or papaw tree which is easily grown and yields abundant fruit noted for its digestive properties.

erected near the timber workings until they give off a vapour which passes into a condensing box and there takes the form of tiny white crystals. These crystals are removed from the box, packed in bags and forwarded to the factory where the crude material is cleaned and recrystallised by a modern distilling plant. It is then subjected to hydraulic pressure by which means the sticky crystal are transformed into the familiar opaque cubes which are then packed in lead lined boxes ready for export. Formosa controls the world supply of camphor and in normal years the monopoly brings in a revenue of more than £400,000.

The manufacture of salt, opium, alcohol and alcoholic liquors is a government monopoly. The salt is obtained by the evaporation of sea water either in shallow vats by the action of the sun or in pans set over furnaces. The opium factory is at Tathoku where both opium paste and morphine are manufactured the former for local consumption which is carefully controlled the latter mainly for export.

Monopoly System and the Middlemen

The monopoly system although it may tend to discourage healthy competition eliminates the middleman who in Formosa plays a large part in the tea industry—the only one which the Japanese have not got completely in their own hands. The tea export business is almost entirely in the hands of foreigners who throng to Formosa for the tea season and there are also numerous Chinese and other middlemen all anxious for a finger in the pie so that although the consumer has to pay a high price the profits of the producer are miserably small.

The government of Formosa has during its twenty-eight years of occupation done a great deal to improve communications. There are over 6,000 miles of public roads connecting town with town and a trunk road which will run through the island from north to south is contemplated. At present its

place is taken by the railway which runs from Keelung to Takow a distance of 231 mile. This is a state line and has extensions which bring the total track up to 500 miles. In addition to this there are over 1,000 miles of private lines mostly of narrow gauge for light railways. The hill district where it has so far been impracticable to build either roads or railways has been opened up by means of push-cars on light trolley lines.

Connections Internal and External

For effective connexion with the outside world the government has subsidised the two main Japanese lines and steamers run from the ports of Takow and Keelung at frequent intervals to Japan and the China ports. The towns have been linked up with telephone and telegraph and there are wireless stations at Keelung in the north and near Takow in the south.

All the internal communications are employed for the transport of produce. Buffalo carts plod along the roads with the produce of the farmer the railways carry the sugar and timber from the south camphor comes from the hills by push-car but owing to the shallow rivers little water transport is possible. In the summer months ocean-going steamers call at Keelung to load tea cargoes for America.

New Prosperity under Japan

The good shipping service between Formosa and Japan and China has made it possible to build up a thriving export trade. Formosa is self-supporting in most of the commodities she produces and has a large balance available for export. The chief exports in order of their importance are coal, tea, sugar, camphor, fibres, rice, bananas and alcohol the principal imports being oil, cake, cotton and silk textiles, crude opium, salt, kerosene, oil, tobacco, iron and machinery. The bulk of the trade is with Japan.

There is no doubt that Japan has set about developing the island with this



Ewing Galloway

PICKING TEA IN NORTHERN FORMOSA ONE OF THE ISLAND'S PRINCIPAL INDUSTRIES

Subjected to the intense heat of the tropical sun, the women toil all day on the tea plantations, carrying two huge sacks, suspended at either end of a piece of bamboo. They are accompanied by their children, who are taught to pick the leaf at a very early age. The tea grown in Taiwan, as Formosa is called by the Japanese, comprises two varieties, Oolong and Pouchong, the former being mainly exported to America, the latter to Java. Green and black tea are also produced. The total annual production amounts to over 25,000,000 pounds and ranks as the second largest export.

aim in view. Nor is there any doubt that she has succeeded. In less than thirty years the Japanese have worked wonders. Few colonies of like size could show such progress in so short a period. They have transformed the island from a wilderness into a thriving dependency.

Not least among their achievements are the improvements they have made in the sanitary conditions of the towns and villages. The Formosan farmers live much as they have ever lived. All over the plains may be seen their little homestead with walls of mud and roofs of thatch girt with a towering fence of closely planted lumbao. But the conditions of the villages and towns which during the Chinese occupation were indescribably filthy have been vastly improved. This has done much to eliminate the outbreaks of mumps and cholera that formerly swept through the island like a fire. The main towns—Takao, the southern port, Tainan, the ancient capital, Keelung and Tientsin are well laid out though some of the modern buildings are far from beautiful and in the construction of a capital that shall be worthy of the colony neither pains nor money have been spared, so that Taihoku is designed on a finer scale than any city in the empire with such wide streets, spacious parks and public buildings as would not disgrace any capital in the world.

The population of Formosa is just under 4,000,000—nearly thirty to the

square mile—174,000 of whom live in the capital. The inhabitants fall into four distinct classes the Japanese numbering some 175,000 most of whom go to Formosa not as settlers or colonists but as Europeans go to the Crown Colonies—as government servant, merchant or planter, the Formosans, descendants of the original Chinese settlers who number 3,500,000 and have by their industry contributed largely to the success of the Japanese. 8,000 foreigners among whom are included all Chinese who are not Japanese citizens by birth or domicile and a few Europeans and Americans, representatives of consular services and commercial firms and missionaries and lastly the aborigines of whom there are approximately 130,000. These are almost all to be found in the eastern hill whither they were driven in former years by the incoming tide of Chinese settlers. Their origin is almost certainly from the mainland of Asia and in size, colour, culture and intelligence they are akin to the aborigines of Borneo, the Malay Peninsula and the Philippines.

They have been found tractable by Europeans and the Japanese by both warlike and peaceful methods have succeeded in subduing many whom they now educate and encourage to lead useful lives but numbers still remain unsubdued and their pacification is the most serious problem the Japanese have to face in their island colony.

FORMOSA GEOGRAPHICAL SUMMARY

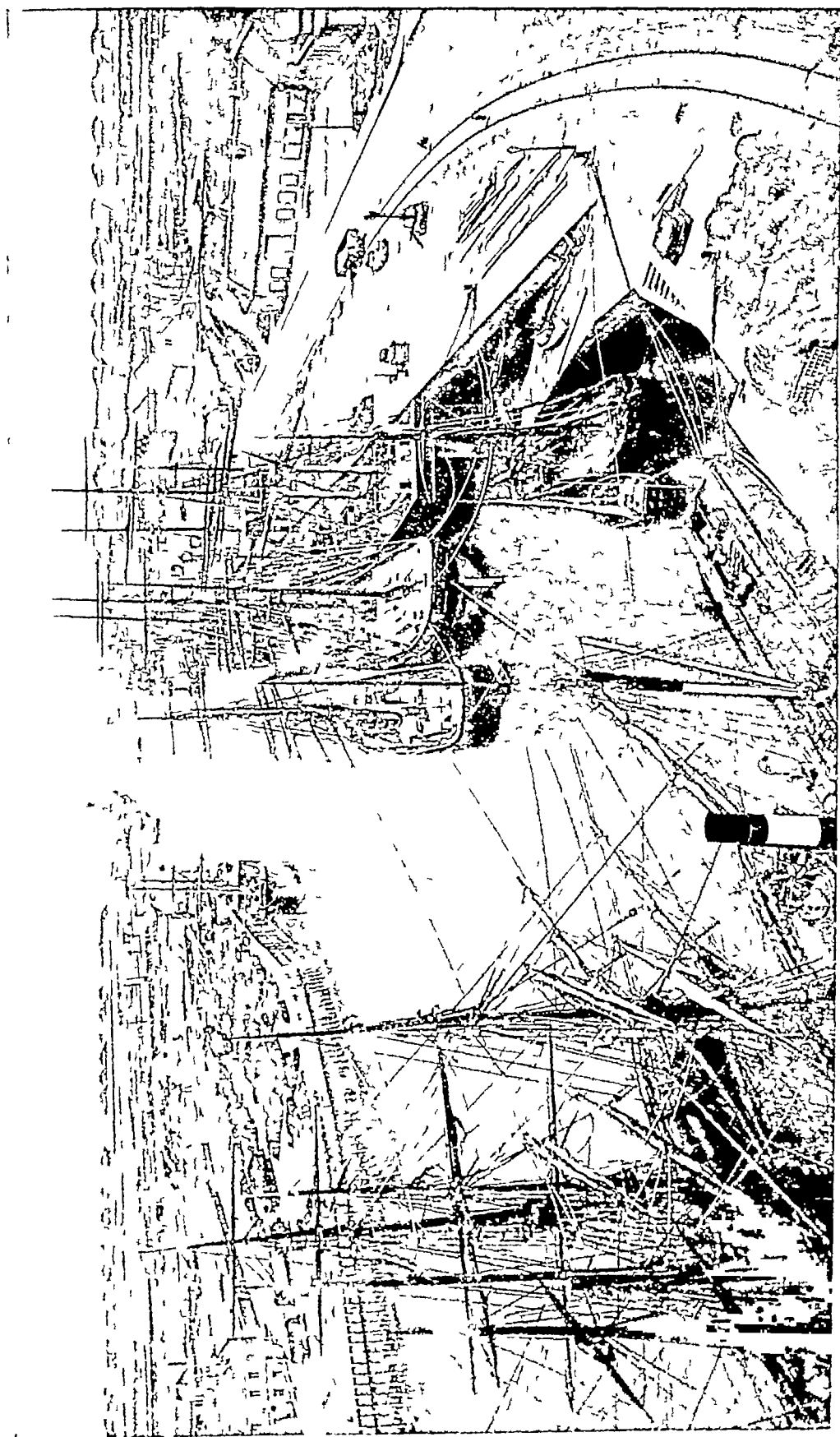
Natural Division. A ridge rising from a submarine platform, a typical Pacific Ocean coastal formation, forming with Japan and the Lu Chiu I. a festoon of islands along the real continental edge (cf. Vancouver I.). A steep, scarped edge faces the Pacific on the east.

Climate and Vegetation. Insular climate with summer rains (cf. South China), warm (cf. Bermuda). The east is the rainy side and being mountainous is clad with virgin forest (cf. Madagascar). The lower west has been settled too long and too closely for any natural vegetation to be left (cf. Ganges and Yangtze valleys). Camphor is the main natural product and is almost a monopoly of this island.

Products. Coal, gold and petroleum are the principal mineral resources. Rice (cf. China), cane sugar (cf. Java), tea and fruits (cf. Philippines).

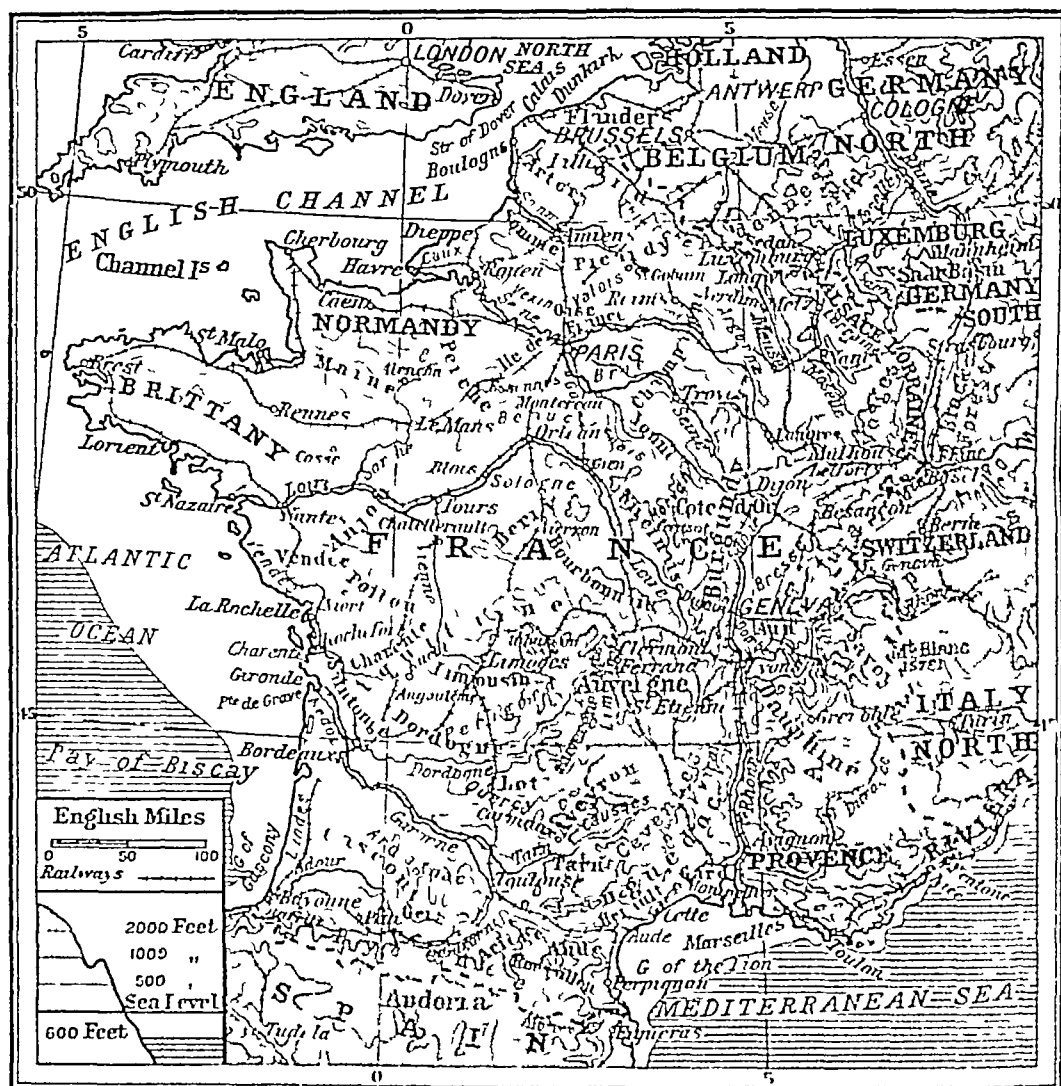
Communications. Well developed steamer service to Japan with which the bulk of the trade is done. Railways and road service are being improved.

Outlook. Probably no colony of equivalent size can equal the development which has taken place during the three decades since 1895 and given stable political conditions the rate of progress should be maintained. This phenomenal growth is bound up with the expansion of the Japanese empire largely at the expense of China and her dependencies.



AVANT-PORT WITH THE JETTIES AT DUNKIRK, NORTHERNMOST TOWN OF FRANCE, ON THE STRAIT OF DOVER

Dunkirk, the "church in the Dunes", is about eight miles from the Belgian frontier, in the department of Nord, 40 miles N W of Lille. It is still rather a Flemish town, a French town and has a considerable harbour, with large floating basins and dry docks, at the mouth of several canals. Ranking third among French seaports, it exports coal and the manufactures of north eastern France and imports wool. Ship-building is carried on, while other industries include the manufacture of machinery, soap and shipping accessories. In the Place Jean Bart is a statue of the famous seaman of that name.



VARIED LAND OF FRANCE FROM CHANNEL TO MEDITERRANEAN

notion of the superficial aspect of France. We shall note that the slope is exactly opposite. The low-lying plains of Flanders, Artois, Picardy, Caux, Vexin, Valois and Braie cling to the escarpment of the Ile de France, and thence Champagne, the Argonne and the plateau of Lorraine rise gently up till they reach the barrier of the Vosges. Between the valleys of the Seine and of the Loire the land is marked by a similar conformation but the curve is much longer. The hills roll away one after another, varying in height from 800 to 1200 feet above sea-level till in the Vosges they attain an altitude of 1500 feet. Southwards from the Gironde to the Alps, the slopes are much more

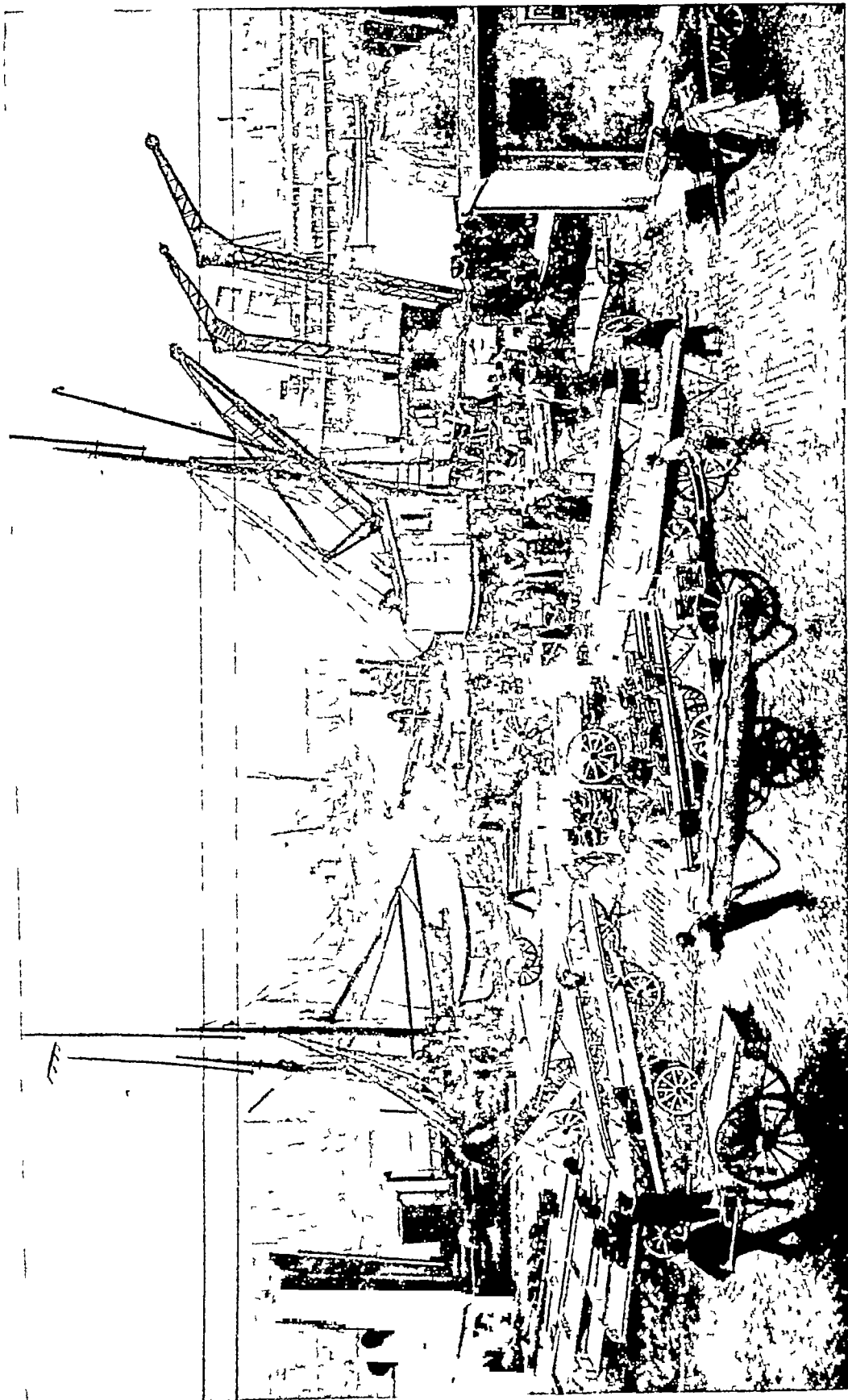
precipitous. From the terraces of Perigord and the Causses we pass steeply to the central heights, which rise upwards 6,000 feet above the sea to descend again no less abruptly towards the Rhone. Beyond this region past the Dauphine, we come to the lower slopes of the Alps, which rise up sharply to the realms of the everlasting snows.

The bird's-eye view which enables us to take in the conformation and superficial aspect of the land also affords an indication of its geological formation. The most notable feature revealed by a survey of the country is its central mountainous system situated in Auvergne between the district called the Limousin and the Cevennes. The



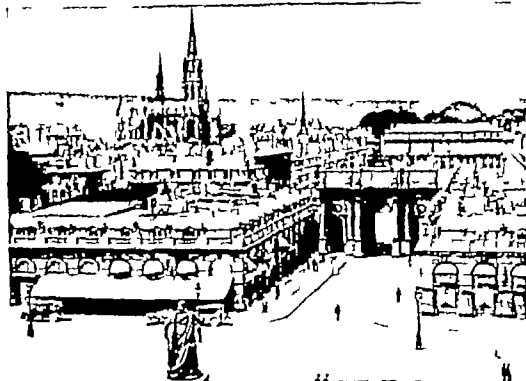
TOWN HALL AND TOUR DU GUET IN THE PLACE DARNES, CALAIS

Calais, France, 1914. The photograph shows the Town Hall and Tour du Guet in the Place Darnes, Calais. The building is a large, multi-story structure with a prominent clock tower on the right. The foreground is a wide, open square with a few small figures of people. The overall style is that of an early 20th-century photograph.



E N A

CROWDED SHIPPING ON THE LIANE VIEWED FROM THE BUSTLING BUT ODOROUS FISH DOCK AT BOULOGNE
Boulogne sur Mer, so called to distinguish it from Boulogne sur Seine, stands on the English Channel, about 157 miles by rail from Paris and at the mouth of the Liane. Possessing a fine harbour, it is the chief fishing port of France and has important industries, including fish curing and ship building. It carries on a large foreign trade, the chief imports being coal, textiles, jute and thread, and the exports wine, fruit, eggs and fish. On a hill in the old town, still enclosed by ramparts built in 1231, and to the north is Napoleon's column to commemorate the army assembled to invade England.



NANCY'S SUPERB PLACE STANISLAS WITH THE PORTE ROYALE

Nancy the capital of the department of Meurthe-et-Moselle, stands on the Meurthe about 220 miles east of Paris. The Place Stanislas, the pride of Nancy was built by Stanislaus Leszczynski and contains the bronze statue by Jacquot. The Porte Royale is a triumphal arch built in honour of Louis XV and to the left of it is the fine modern Gothic church of St Etienne.

Donald McLeese



WASHING-DAY ON THE WOODED BANKS OF THE MOSELLE AT TOUL

Standing on the Moselle about 14 miles from Nancy Toul was the Roman town of Tullum Lemorom, and is first class fortress. Over the tops of the trees can be seen the towers of the church of St. Etienne, famous for its elaborate west front and cloisters and formerly cathedral. The industries include the manufacture of pottery and lace and the inhabitants number about 14,000.

Donald McLeese



Special Press

FINE CARVING ON A WOODEN HOUSE AT SENS

Standing at the corner of the Rue de la République this curious house is remarkable for the old beam on which is carved the genealogy of the Virgin. Sens is on the Yonne and has a beautiful Gothic cathedral begun in the tenth century.

juxtaposition of two opposite and contrasted regions—the Parisian Basin and the Massif Central.

The Parisian Basin appears as a region of hydrographic concentration. All the principal affluents of the Seine converge there. From Paris, which is only about sixty feet above sea-level, the ground rises in all directions, culminating eastwards in the Vosges.

The Massif Central, on the other hand, is a region of hydrographic dispersion. From it descends the Loire and its tributaries, the Charente, the Dordogne and the important tributaries of the Garonne.

All the other parts of France derive their significance from, and are attached to, one or other of those two. To the Parisian Basin belong the agricultural

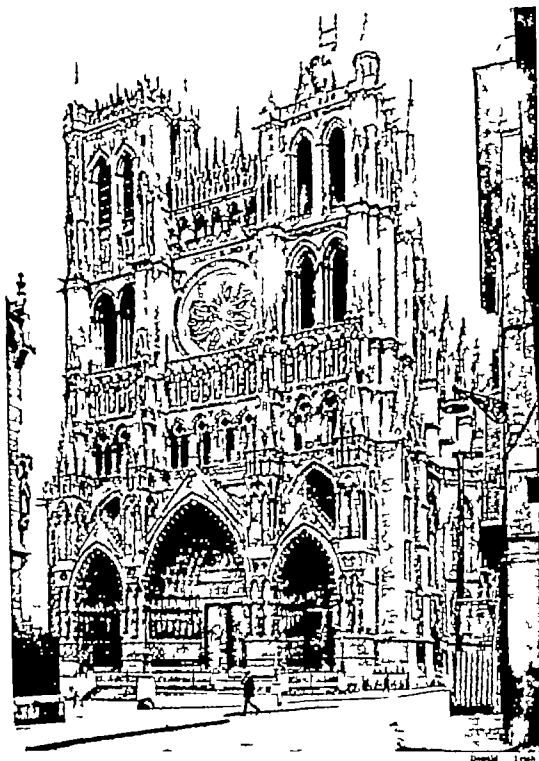
and industrial plains of the north. To the Massif Central belong the basin of the Gironde and the plains of Toulouse, which link up with the plains of Languedoc. Lastly, to the east, on the hither side of the Alps and the Jura mountains, the long valley of the Rhône and the Saône, opening into the plains of the Rhine and debouching on the Mediterranean, give access alike to the Massif Central and to the Parisian Basin.

Such is the composition of an entity whose variety, harmony and cohesion are unequalled in any other part of Europe.

If now we consider France in relation to the surrounding regions, we shall see that she is the goal, as it were, to which all Western Europe converges. On the one hand the plain of northern France, the schistic plateaux of the Rhine, the massif of the Vosges and

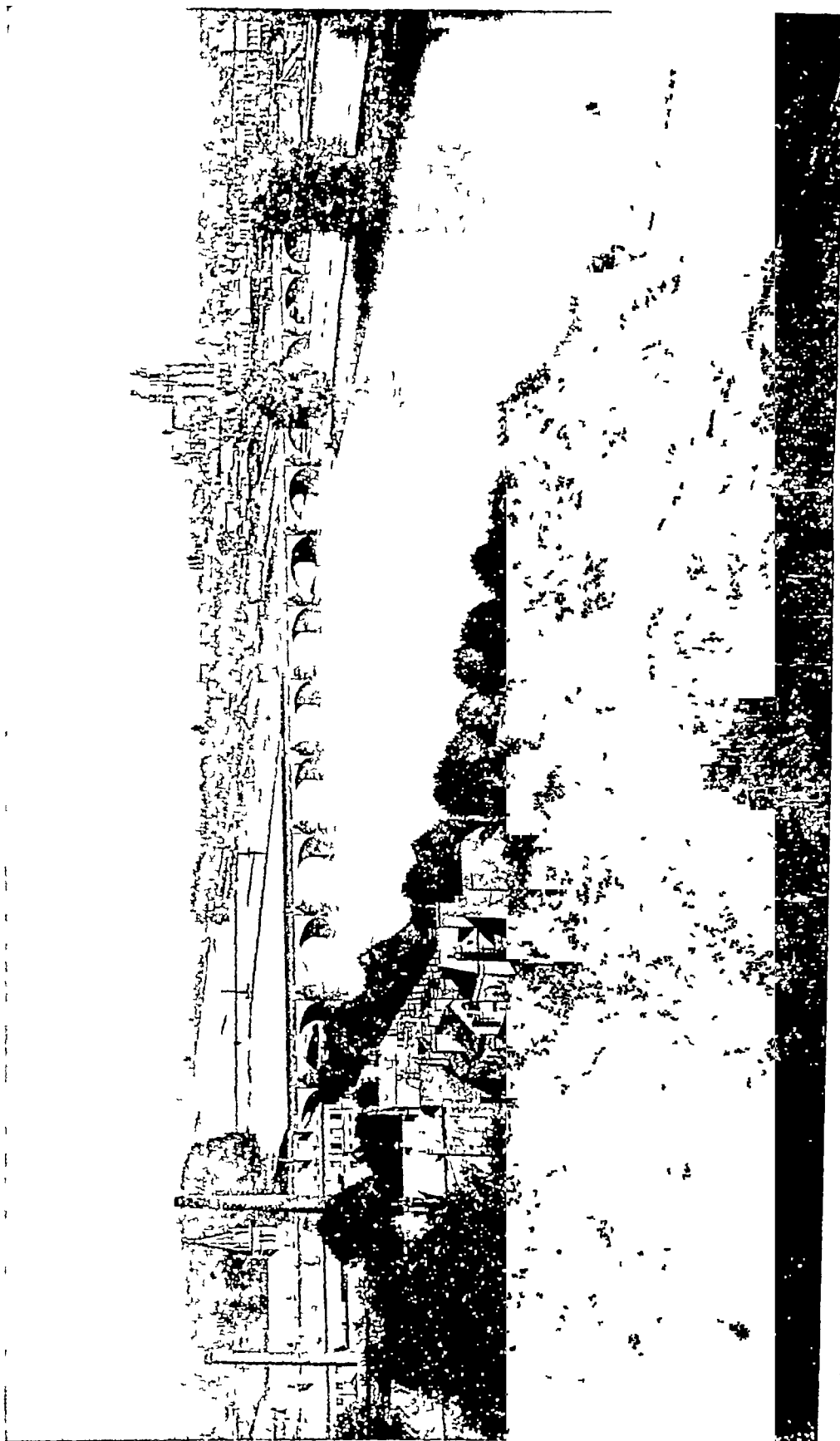
the Black Forest, the Jura and the Alps, all find their termination there. On the other, she leans against the steep green slopes of the Pyrenees, the northern facet of the Iberian peninsula, while on her third side she comes nearer than any other country to Great Britain, and the close relationship of the two countries is displayed without interruption from one bank to the other of the Channel which separates them.

This description enables us to appreciate the wonderful diversity of the characteristics of France and the happy proportions in which they are distributed. There will be found scenery to the taste of everyone. Of mountains there is every variety, from the lofty summits of the Alps and the Pyrenees to the naked domes of Auvergne and

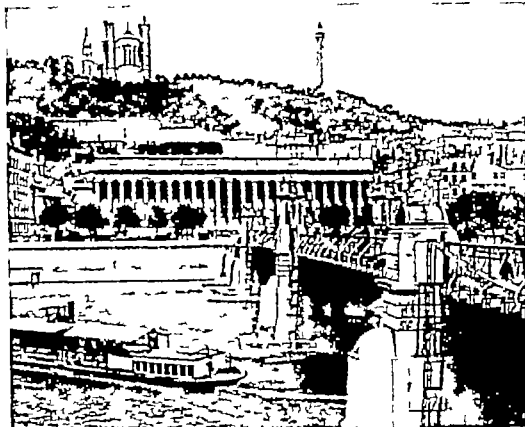


WESTERN FACADE OF AMIENS CATHEDRAL WITH ITS ROSE WINDOW

Amiens stands on the Somme and is the principal of the Somme department. It is an important manufacturing and distributing centre. Its industries include spinning and weaving textiles besides the making of velvet and hosiery. The finest building in the city is the Gothic cathedral which was built mainly in the thirteenth century and is remarkable for its size and wonderful stonework.



PONT DE TOURS AND THE SUSPENSION BRIDGE CALLED THE PONT ST CYR, SPANNING THE LOIRE AT TOURS
 EN A
 Lying on the left bank of the Loire, between it and the Cher, Tours is the chief town of the department of Indre et Loire. It is a prosperous town, the industries including the manufacturing of iron and steel goods, boots, shoes and machinery. On the right of the photograph is the cathedral of St Gatien. Though it was begun in 1170 and not finished till the middle of the sixteenth century, the various portions are in complete harmony. It is flanked by two towers 205 feet in height, surmounted by cupolas in the Renaissance style. In a garden behind the cathedral are Roman walls and remains of an amphitheatre.



Erving Under

CHURCH OF NOTRE DAME DE FOURVIERE FROM THE SAONE AT LYONS

At the confluence of the Rhône and Saône Lyons is the third city in France, a railway centre of first importance and by its position on two great rivers, one of the busiest ports in France. It has large plants for railway traffic. Noted chiefly for the centre of the silk trade it has many industries such as ironworks, engineering, electrical and automobile works, pottery, glass, leather and brewing.

the bald tops of the Vosges. Plains and uplands hills and dales alternate in charming sequence. Great rivers and numerous streams water the country and almost all of them have estuaries whose depth and extent afford admirable shelter for shipping. The seaboard is sufficiently extensive to offer every example of coast scenery. The wild grandeur of the rocks of Brittany, the softness of its climate, its verdure and the colour of the sea have won for it the name of the Coast of Emerald. The long line of sand dunes which stretches from the Pointe de Grave at the mouth of the Gironde as far as Biarritz and the Spanish frontier past the heath country or "Landes" of Gascony so rich in pines, is known as the Côte d'Argent the Silver Shore. The Mediterranean coast is divided into two parts, both of

them picturesque though not equally well known. The part which extends from Albères to the mouth of the Rhône forms a long succession of lakes and pools fringed with vineyards forests of ilex and olive. The other part from Marseilles to Mentone is celebrated throughout the world under the names of the Côte d'Azur and the Riviera. Its natural beauty and its climate afford an irresistible attraction to visitors who are able to escape from the rigours of less favoured regions.

The soil of France is well drained. The rain-water is conveyed to the sea by rivers with numerous tributaries but the rivers are not long, nor in their volume of water comparable with the great rivers of Africa or America. Their source as a rule is at no very considerable altitude.

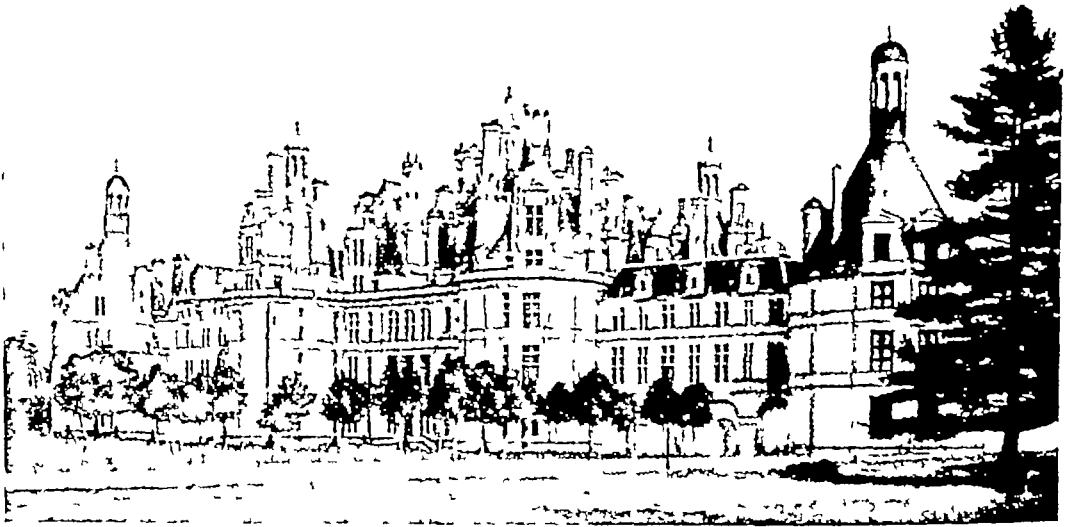


HARBOUR AND QUAYS OF THE THRIVING SEAPORT OF LA ROCHELLE FROM THE TOWER OF S SAUVEUR

La Rochelle, in the department of Charente Inférieure, lies in a bay sheltered by the islands of Ré and Oléron and has a fine harbour. The new harbour of La Pallice, three miles west of La Rochelle, was begun in 1890 and is now one of the best on the west coast of France. There is trade in cereals, coal, wines, salt, colonial produce, sardines, etc., and ship building and its allied industries are important. The architecture of the city is partly of the Huguenot period, the houses having arcades called "porches," tall brackets supporting the roofs and prominent carved gurgoyles.

The source of the Seine is in the Côte d'Or, Burgundy, at an altitude of 1,560 feet. The Seine flows gently and with many windings to Rouen and Havre and reaches the Channel after a course of 485 miles. Its volume of water measures only 390 cubic yards to the second. That of the Thames is still less, being 256 cubic yards. The Seine is navigable over a considerable distance amounting to the greater part of its course.

reaches the Atlantic by a broad estuary called the Gironde. It is 450 miles long, and it also has a very irregular flow. It passes through Toulouse and Bordeaux, where the tide is felt 50 miles inland. At Bordeaux the Garonne is 500 yards wide, and its depth of 20 feet allows large ocean-going vessels to reach the dock there. Its volume of water, more than twice that of the Seine, is 910 cubic yards.



G. Uehler Knox

NORTHERN FACADE OF THE MAGNIFICENT CHATEAU NEAR CHAMBORD

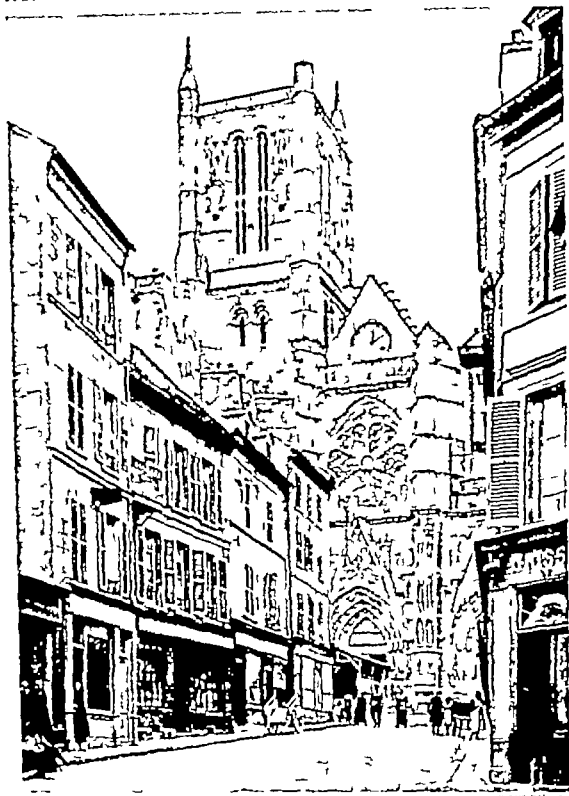
Situated in an enormous park over 20 miles in circumference, the Château de Chambord is said to be one of the finest Renaissance houses in existence. It contains over 400 rooms and the stables are supposed to have accommodation for 1,200 horses. One of its most unusual features is the spiral staircase, so arranged that one person can ascend and another descend without seeing each other.

Rising at an altitude of 4,510 feet in the Massif Central, the Loire runs for 635 miles, with an average volume of 498 cubic yards of water to the second, past Nantes to the Atlantic. It is the widest and longest of French rivers, but its volume of water is very irregular. In summer it goes nearly dry and enormous sandbanks appear in its wide bed. But with the rains and the melting of the snows it rises to 30 feet above its mean level and floods its valleys. On account of the irregularity of its flow, the Loire is only navigable for a very short distance at the end of its course.

The Garonne rises in the Pyrenees at a height of 6,140 feet above sea-level. Its actual source is in Spain, but after a few miles it passes into France and

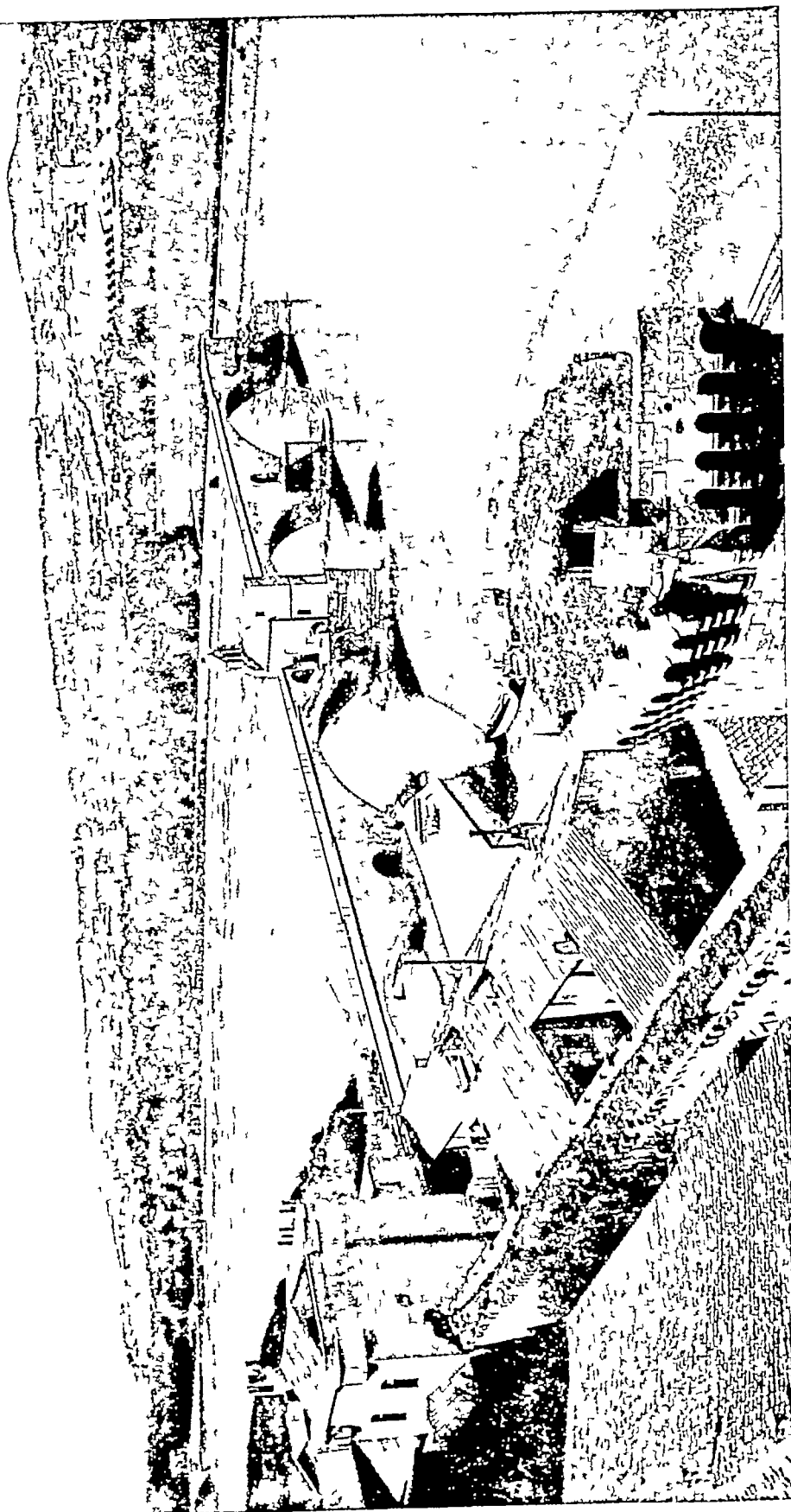
The Rhône rises in the Swiss Alps at an altitude of 5,750 feet, and after flowing through Lake Geneva it reaches France, keeping for some distance in a westerly direction. After receiving important tributaries it reaches the Mediterranean through a delta, which is continuously encroaching on the sea. Its volume is very considerable, being some 2,860 cubic yards to the second, but it is also very variable, and after the rainfalls becomes a devastating torrent, often flooding the surrounding country for miles.

Owing to the great energy and the enterprise of M. Herriot, the French Prime Minister, who was for twenty years Mayor of Lyons, a far-reaching scheme for the canalisation of the



CATHEDRAL OF S ETIENNE IN THE ANCIENT TOWN OF MEAUX

In the department of Seine-et-Marne, Meaux, the old Lutetia, is situated on the Marne. There is a large trade in grain and dairy produce and sugar. Wool, textiles and steel are manufactured. The cathedral is Gothic edifice of the 14th-15th centuries, but masked by the late roof of the south tower. The north tower is 250 feet high and commands an extensive view.



RUINS OF THE PONT S. BENEZET AT AVIGNON, WITH VILLENEUVE ON THE RIGHT BANK OF THE RHONE

Avignon is still surrounded by massive walls, built in the fourteenth century and studded with towers and gateways. They present an interesting example of medieval fortifications, the best preserved portion is near the Porte S. Lazare. The Popes regularly resided in Avignon from 1309 to 1378, the town and surrounding district remaining a papal possession until 1791. The cathedral is a massive and sombre Romanesque church built mainly in the twelfth century. The Pont S. Bénézet was built across the Rhône in 1177-83 and was often restored, but has been in ruins since 1609. On a pier stands the chapel of S. Bénézet.

Rhône was set on foot. It would supply electric current for the illumination of all the towns and villages along the river banks, and would furnish sufficient power to electrify all the railways throughout the whole of southern France. By virtue of the scheme the river would become navigable right down to the sea and through the Saône

France which they water for a large part of their course.

The rainfall conditions correspond in a large measure to the great fluvial basins. The highest figures recorded on the rain gauge over 40 inches annually are in the mountainous region of the Pyrenees, the Alps, the Jura, the Cévennes and the Central Plateau to



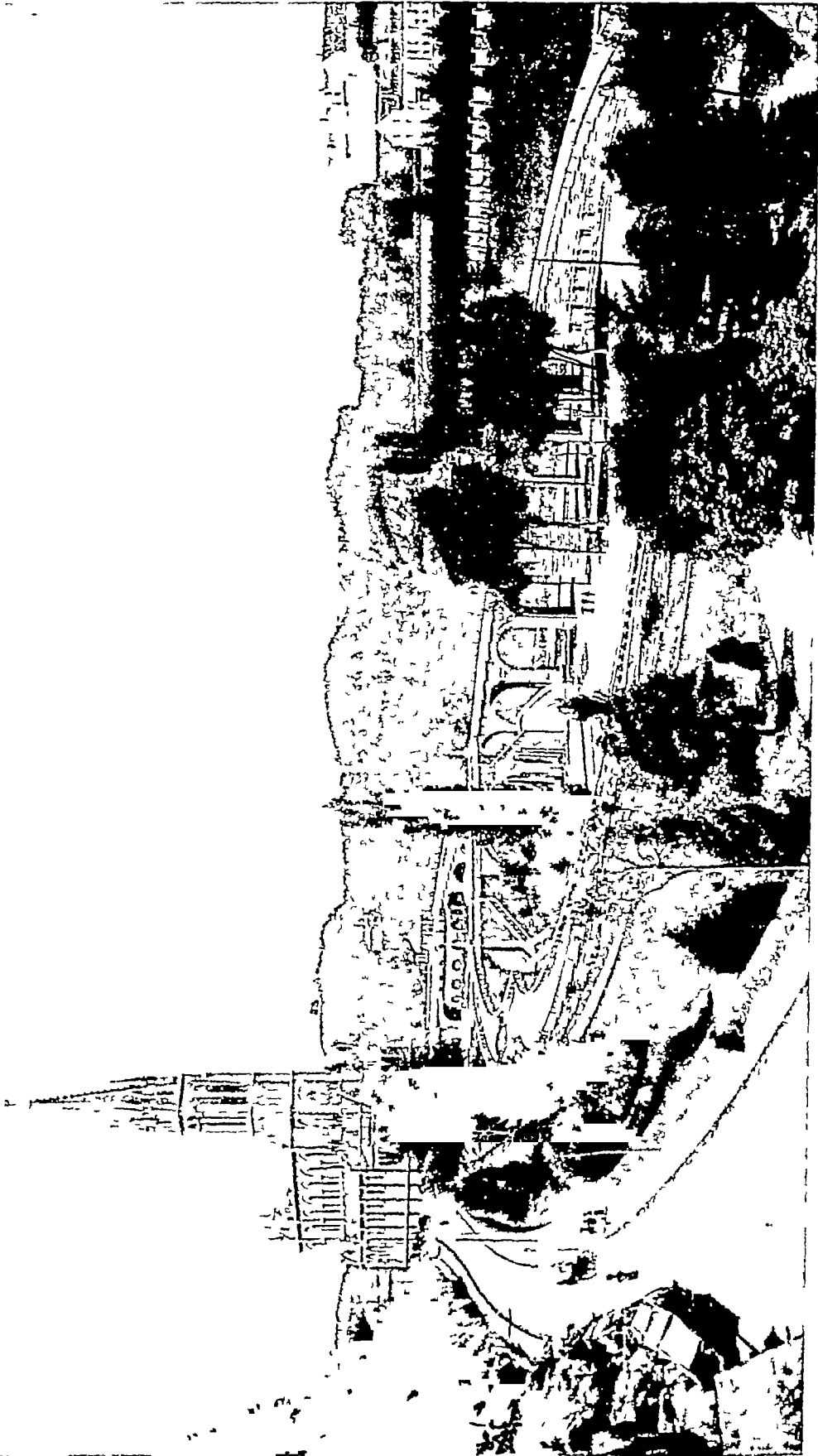
LOOKING TOWARDS AVIGNON AND ITS PALACE OF THE POPES

Avignon stands on the left bank of the Rhône in the department of Vaucluse. It has several industries, chiefly in connexion with silk, and its trade is country produce, but is better known for its historical associations and beautiful situation. The Palace of the Popes, with its battlements, machicolations and lofty towers, has the appearance of a fortress rather than a palace.

and the Seine which are already linked by a canal, would make a waterway uniting the Channel to the Mediterranean. Through the Saône also and the junction which unites that river to the Mulhouse Canal it would bring the Rhine into communication with Lyons and Marseilles.

The Rhine runs for some part of its course along French territory and two of the major tributaries of its left bank, the Moselle and the Meuse, come with the Schelde (Escaut) from

which should be added the Landes. The Rhône Basin and the Lorraine slopes along the valley of the Meuse come next with 30 to 40 inches. The basins of the Garonne and the Loire receive more or less equal quantities of rain—that is to say about 25 inches yearly—but the basin of the Seine, especially in the Ile de France with Paris for its centre, never attains that figure. The average rainfall in Paris is 32 inches. It is curious to note that this low figure is also met with in the



BEAUTIFUL PORTION OF LOURDES, A SOUTHERN TOWN OF FRANCE FAR-FAMED AS A PLACE OF PILGRIMAGE

Lying in hilly country in the department of Hautes Pyrénées Lourdes owes its fame to its pilgrimages, and interest centres in the small grotto of Our Lady of Lourdes, in which it is alleged the Virgin appeared to a peasant girl in 1858 and disclosed to her the healing properties of the spring close by. Vast numbers of pilgrims, estimated at 600 000 annually, seek this miraculous spring and many recoveries have been recorded. Other important features are the Basilica, the Gothic structure with a handsome tower crowning the west façade seen on the left, and the church of the Rosary, lying below it, a rotunda in Byzantine style.

valleys of the Forez and the Limagne which are among the most fertile districts in France as well as in the plain of Languedoc, Camargue and Crau which are to be ranked among the poorest.

The incidence of the rainfall is pretty regular. It falls in all seasons but with a marked increase during the cold period. The ratio between the quantity of water and the days of rainfall

Sologne which is part of Berry and is encircled by the bend of the Loire south of Orleans, the Landes which extend south of the Medoc and Bordeaux down to the bank of the Adour and Dombes between the Saône the Rhone and the Ain west of the Jura range. Drainage and afforestation have already reclaimed a large part of these marshes and transformed them into arable land or woodland.



BIRD'S-EYE VIEW OF THE MEDIEVAL TOWN OF VILLENEUVE LES-AVIGNON

A Geneva lies. A Lyons lies on the right bank of the Rhone opposite. A Lyons the picturesque capital of the department of Vaucluse. It possesses several of the old walls, the old bastions, the old towers on the towers of the towers, and the old towers of the towers. The towers are built in towers, still intact and practically the same as they existed in medieval times.

varies considerably. For example 68 wet days suffice to give 23.3 inches to Marseilles, but Paris needs 170 to obtain only 22 inches. 124 days of rain at Lyons give 32 inches, but 145 days at Clermont Ferrand only give 25.1 inches, and 61 days at Bordeaux 25.4 inches. At Nancy 146 days give 30.8 inches and 220 days are needed at Brest to obtain 32.4 inches.

Owing to this moderate rainfall there are very few marshes in France. They are found chiefly in three regions. The

Apart from the Lake of Geneva, of which a large part is considered as within the French frontier there are but few lakes in France and small ones at that. In Savoy we have the Lac du Bourget a little over 17 square miles and the Lac d'Annecy about 11 square miles, and south of Nantes the Lac de Grand Lieu with a superficies of 14 square miles.

France enjoys a far more temperate climate than other countries situated in the same latitude as the following



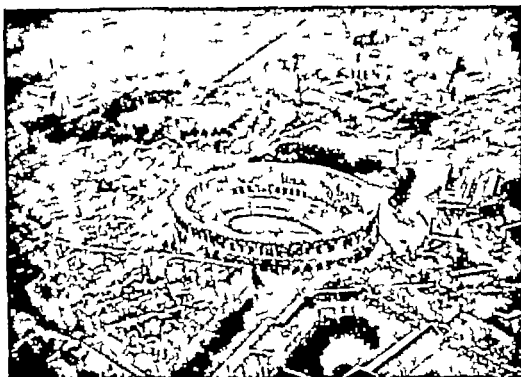
Aerodrome

AERIAL SURVEY OF BAYONNE, CITY AND SEAPORT OF FRANCE IN THE DEPARTMENT OF BASSES PYRENEES

Bayonne lies attractively at the junction of the Nive and Adour, three miles and a half from the Bay of Biscay, and contains a notable citadel, old and new castle, and a beautiful medieval Gothic cathedral. The three divisions of the town, which are formed by the rivers, are Great Bayonne, the most important, seen on the left bank of the river Nive, Little Bayonne, the artisan quarter, on the right and connected with the former by three bridges, and the suburb of S. Esprit on the farther side of the Adour, the southern extremity of the Pont S. Esprit being just visible on the right of the photograph.

convincing example will how Paris is in the same latitude as Montreal but whereas in Paris the average temperature for July, the hottest month in the year is 68.5 Fahrenheit at Montreal it is 66.2 Fahrenheit. In the coldest month, January the mean temperature in Paris is 37.4 Fahrenheit while at Montreal it sinks as low as 20.4. It is interesting to add that the St. Lawrence is frozen

and 75 in July. These readings become the more notable if we compare them with those recorded in other parts of France which leads us to conclude that diversities of geographical aspect are bound up with diversities of climate. The mountains are covered with snow in the cold period and allow of winter sports. This impression is increased by the fact that the vegeta-



AMPHITHEATRE FROM THE AIR, MONUMENT OF ANTIQUITY AT NIMES

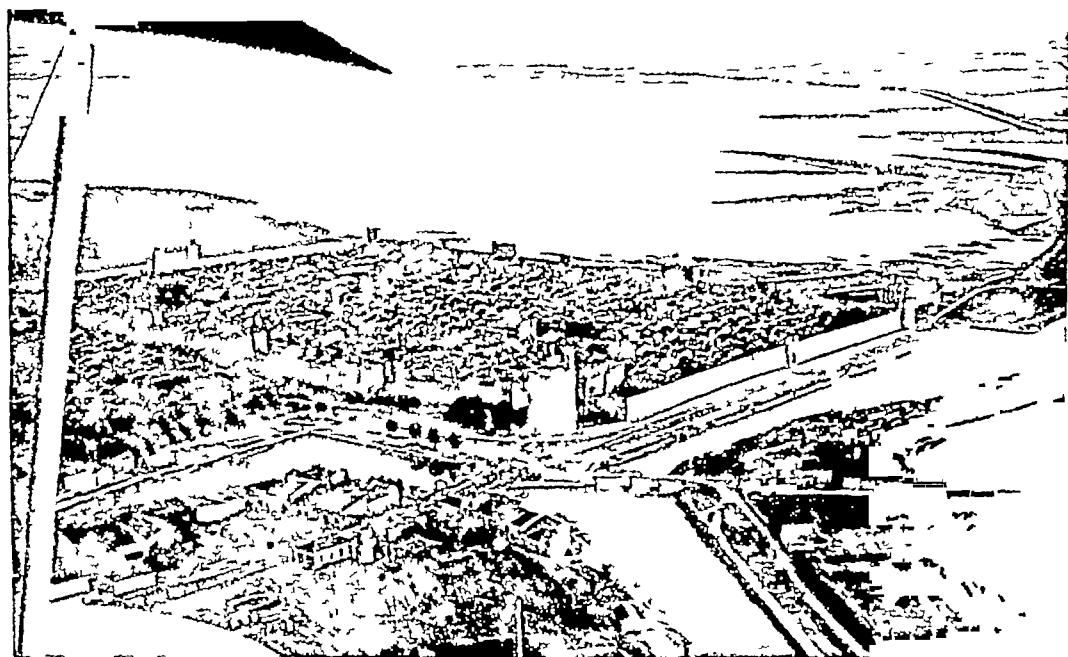
1. fertile plain to the southwest of the city, adjoining the Cévennes, to the department of Gard, lies Nîmes, one of the most ancient and interesting French cities. Among the numerous Roman remains is the magnificent amphitheatre, an excellent example of preservation, though damaged from the first and second centuries, not being suffered to be lost for its beauty and interest.

for 140 days in the year while the Seine like the Thames freezes but very rarely. This mildness of climate is due to the warm oceanic winds which reach the coasts of France and mitigate the winter's cold. Thus Brittany and the Gulf of Gascony (Biarritz) are very mild in winter while in summer the sea breezes afford a very welcome relief from the heat.

On the shores of the Mediterranean the winters are particularly mild. The average temperature for the year at Nice is 60 being 47 in January

and 75 in July. These readings become the more notable if we compare them with those recorded in other parts of France which leads us to conclude that diversities of geographical aspect are bound up with diversities of climate. The mountains are covered with snow in the cold period and allow of winter sports. This impression is increased by the fact that the vegeta-

tion in these regions never seems to slumber. Plant life and most of the trees are continuously in leaf and never present the stark appearance afforded by the vegetation in the northern provinces. This all-prevailing diversity is no less a characteristic of the vegetation of France whether natural or cultivated. There is scarcely any natural vegetation in France save the forests. These are found mainly in the east and north-east (Ardennes and Champagne) and in the mountainous districts of the



E N A

AIGUES-MORTES, WONDERFUL SURVIVAL FROM THE MIDDLE AGES

Aigues Mortes is the most perfect specimen of a medieval town in existence. The enceinte, completed about 1280, forms a rectangle of 600 by 330 yards—the walls, from 25 to 33 feet in height, having fifteen towers and ten gates, it was from here that Louis IX started in 1248 and again in 1270 for the Crusades. Much of the neighbouring country is under water.

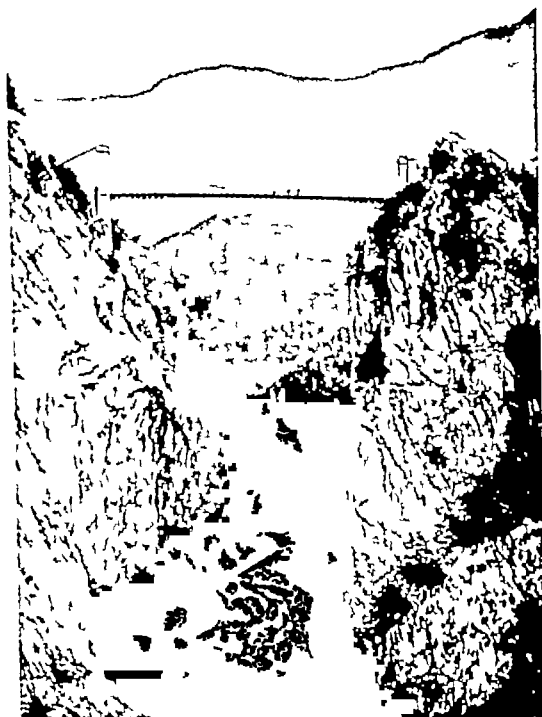
Vosges, the Jura, the Cévennes, the Alps and the Pyrenees. There are, however, some wooded districts of considerable extent in the Ile de France, Burgundy, Morvan, Le Perche, and in Picardy.

Lastly, there is the vast pine forest of the Landes, which, however, is of artificial creation and has transformed what was once a marshy and desolate tract into one of the richest and most flourishing districts in France. The pine produces resin, which is a factor in numerous chemical by-products. The forest of the Landes is under state control, and furnishes timber for mines and immense quantities of wood for heating. The government also has control of most of the forests of the Vosges, Jura, Pyrenees, Savoy and the larch-trees of the Alps. The state it is, too, that is responsible for the systematic reforestation of the Alps in the upper valley of the Durance and in the higher reaches of the Tarn

between the Cévennes and the Central Plateau, a work that has been proceeding for some years.

In the Albères district, at the eastern extremity of the Pyrenees, there are some considerable plantations of cork-trees.

There is practically no unproductive land in France. The marshes have been filled in and dried by the plantation of pine forests, the poorer tracts of chalky or stony ground unsuitable for the cultivation of corn, wheat or cereals generally are favourable to the growth of cork-trees and also of the olive and the vine, one of the glories of France. The vine does not flourish in arable ground, in rich soil. The chalk lands where there is but a shallow layer of soil are best suited to its cultivation. On the steep hillsides, where tillage is either difficult or impossible, where the rains make furrows in the ground, the vine clings fast to the soil, keeps it in place, filters the rain, and gives in rich



PONT DE L'ABÎME OVER THE DIZZY GORGE CLEFT BY THE CHERAN

A fine white-watering place of south-west France. At Le Dain lies 825 feet above sea level. It is surrounded by present in the gorge. The town in its vicinity; none more majestic than this of the Pont de l'Abîme, a graceful suspension bridge of entire length of 730 feet, fine across mighty abyss with sheer drop of 315 feet into the boulder-strewn gorge of the Chéran.



L. A. Waymark

QUAINT OLD-WORLD ARCHITECTURE IN A CORNER OF SALIES-DE-BEARN

Some ten miles north of Sauveterre de Béarn (whence the splendid view of the Pyrenees illustrated in page 1932 is obtained) lies Salies de Béarn, a small town with about 6,000 inhabitants which derives its name from its salt springs, said to have been utilised since the sixteenth century.

Despite the fact that the water is cold it is used for bathing all the year round.

abundance the wine which forms the Frenchman's favourite beverage and those choice and gracious vintages which are celebrated throughout the whole world.

Nevertheless, the vine does not grow everywhere in France. It is not found farther north than a line drawn from St. Nazaire at the mouth of the Loire to Sedan in the Ardennes. The richest vineyards are those of Champagne, Burgundy and Bordeaux. The wines of Burgundy come chiefly from the Yonne Valley (Chablis), the Côte d'Or (Beaune) and from the districts of Maconnais and Beaujolais. The vines of Bordeaux (chêrets)—at least the choicer vintages—are produced in the immediate neighbourhood of that city on the slopes of the banks of the Garonne and the Gironde. There is however an uninterrupted succession of vineyards all along the Dordogne,

the Upper Garonne and its tributaries, the Gers, the Lot, the Tarn and the Aveyron. South of the Garonne, as far as the Pyrenees, the vine is cultivated also, and furnishes the famous eau-de-vie of Armagnac. But it is to the north of Bordeaux, in the Charente districts, that the finest cognacs and "fines champagnes" are produced.

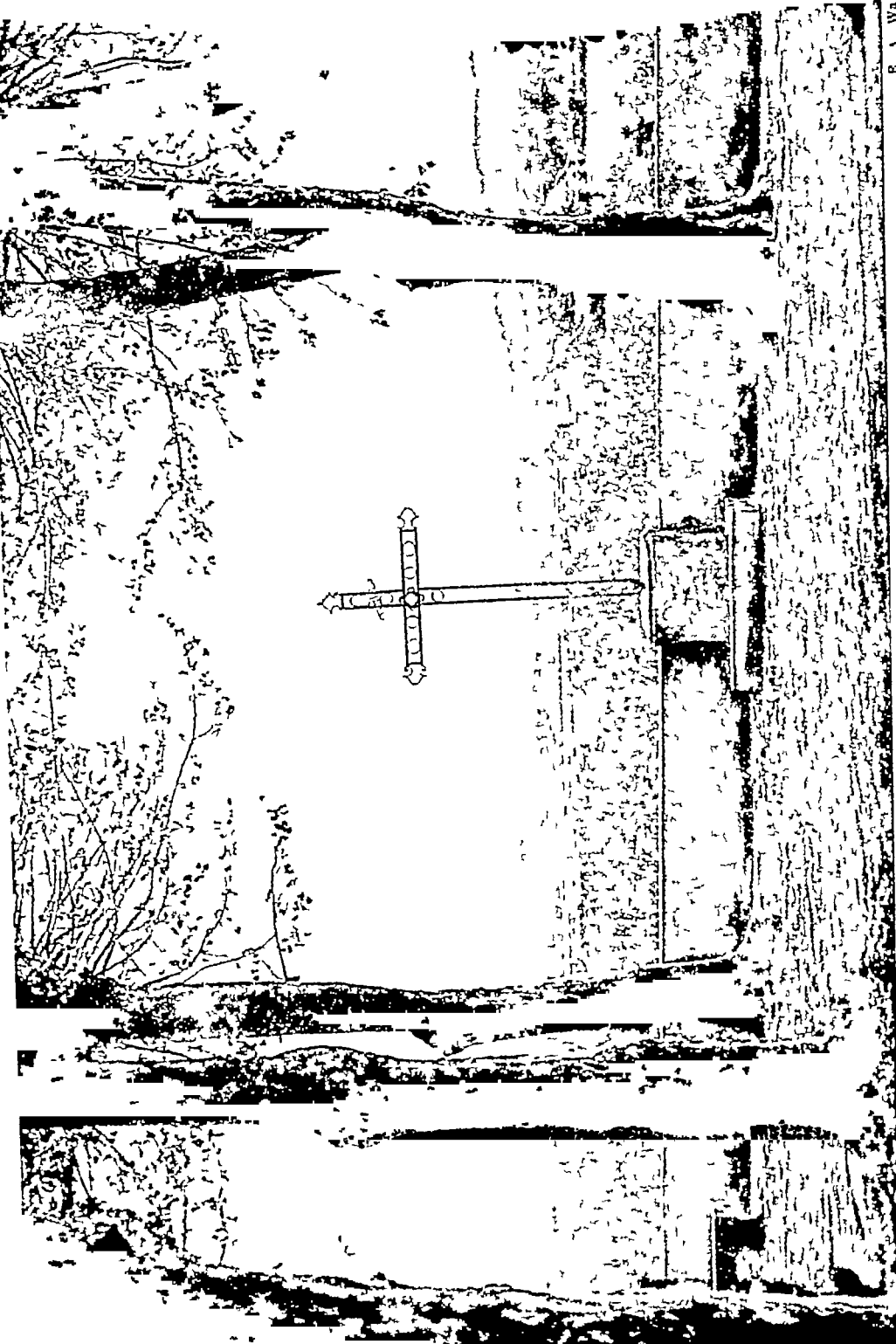
In the eastern part of France and throughout the northern districts there are numerous hop gardens, and beer is the normal beverage of the inhabitants, as cider is in Picardy, where orchards alternate with pasture-lands.

The cultivated surface of France is 82 per cent of the total, the non-cultivated is 12 per cent, and the non-cultivable only 6 per cent. The cultivated portion is divided into tillage lands 62 per cent, woods and forests 19 per cent, natural meadows and grasslands 12 per cent, vineyards



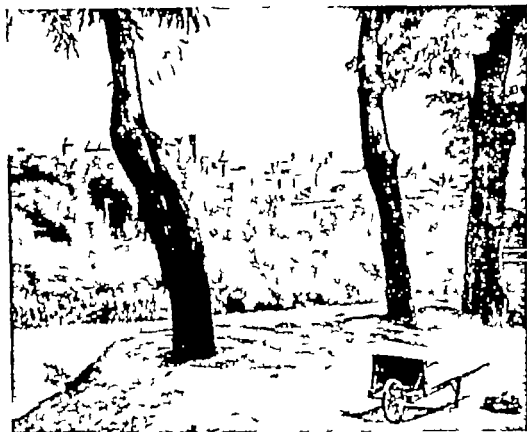
BENEATH THE WATCH TOWER OF THE ANCIENT FORTRESS OF FOIX

Most of the street in Foix, the chief town of the department of Ariege, are dominated by the towers of the castle which stand proudly on precipitous rock 200 feet high. There are several small houses and the town is the commercial and administrative centre for the surrounding district, but its interest is mainly historical and centres in the romantically situated old stronghold.



B. A. Waymark

SNOW-CAPPED PEAKS OF THE FAR-DISTANT PYRENEES SEEN FROM THE LITTLE TOWN OF SAUVETERRE-DE-BEARN
 From Sauveterre de Bearn, a delightful small town in the department of Basses Pyrénées, noted for its ruined chateau of the twelfth and thirteenth centuries, lovely views of the distant Pyrenees are obtained. This mountain range which divides France from Spain has a distinct charm of its own differing considerably from that of the more impressive Alps, due chiefly to its location in the warm and sunlit climate of the south. Here, too, the line of perpetual snow is found at a higher altitude than in the Alps and consequently luxuriant forests and vegetation clothe many of the slopes to a height of some 9,000 feet



TOWERS AND RAMPARTS OF CARCASSONNE SET ON A HILL

It is a wonderful old fortress town of Carcassonne, southern France, situated in a most very unusual position. It is a town which was built during the Middle Ages. The fortress town is built on a hill and is surrounded by towers and are without parallel in Europe consisting of two main ramparts protected by no fewer than fifty four towers and pierced by two gates both with double defensive work.

4 per cent and the remaining 3 per cent is put to diverse uses connected with agriculture. This extreme division of property in France arises from the fact that since the Revolution property is accessible to all that the law of primogeniture has been abolished and that children inherit from their parents in equal proportions. It thus happens that rural properties have to undergo frequent partition. Nearly three-fourths of the properties are farmed by their owners themselves. Farms held on lease amount to 22 per cent. and, on the system of tenure known as metayage to 7 per cent.

Of the total land under cultivation, 57 per cent. is devoted to the growing of cereals, 25 per cent. being taken up by wheat, 30 per cent. by forage and 2 per cent. by industrial crops. The

production of wheat has been developed and made general by alternating it with crops of cattle food which benefits the wheat and improves the cattle.

Apart from wheat the other crops are very varied but very characteristic as, for example maize which is grown in the Saône valley in the Pyrenees district and round about the Garonne where the heat and moisture are especially favourable to its growth. Then there is the flax of Brittany, Anjou Nord and the Pays de Caux, hemp in Anjou, clover in the Pays de Caux and Nord, sugar beet and chicory in Nord and French Flanders, saffron in Catalonia and the south west, buckwheat in Limousin, vegetables, fruits in the Pays d'Ayignon and Limagne, tobacco in Dordogne to which must be added the cultivation



G. S. Layton

GLACIER'S INEXORABLE DESCENT FROM THE FLANKS OF MONT BLANC

The perpetual snow covering the loftier Alpine heights, gradually consolidating, is slowly forced by pressure above it into the valleys beneath, one of these imperceptibly moving masses of ice is the Mer de Glace formed by the conjunction of the Talèfre Glacé and Lechaux glaciers. Clearly illustrated above are the curved dirt bands resulting from the differential glacier motion.



L. G. S.

TINY ROCK GARDEN AMID THE SNOW CLAD DAUPHINE ALPS

At an elevation of nearly 7,000 feet, the Col du Lautaret is a favorite Alpine resort both in the summer and winter. The Alpine garden of the Grenoble University contains brilliantly colored poppies and many other mountain plants, all examples of the alpine flora, that the snow-clad slopes to the east. The garden is flanked by barren and lofty peaks.

of timber in Lorraine and the production of boxes in Caenn.

The amount of flour grown and the percentage of mealies and potatoes indicate the importance of the cattle raising in France. The French produces wheat for export, the chief export of Saxony, at fifty million bushels in January in the Caenn district. Auvergne and French Flanders are chief chiefly in Champagne, the Caenn, Rhin and Rhenish, the Doubs and the Alps. Cattle are found chiefly in the Pyrenees district. They are reared everywhere in France but especially in the dairy farming district of Vendée, Normandy and the Pyrenees. There in Flanders, the Limousin and the Pyrenees, milk, butter and cheese are produced. In Vendée, Flanders, the Caenn, the Alps, Savoy and Jura, poultry which is reared all over the country is a speciality in Breton, Maine and La Beauce.

1. Jewelry and Coal Disturbances

Thus the agricultural products of the various districts of France are in accordance with the various characteristics of climate, soil and geological formation with which nature has endowed them.

Geographical causes are insufficient wholly to explain the distribution of industrial centres. However the presence of coal exerts a preponderating influence thereon, whether because that commodity is to be found on the spot in the mines, or because the canals and waterways make it obtainable at a low cost. Only in such districts has it been possible to establish the metallurgical industry on a large scale. A convincing proof of that is afforded by a comparison of Lorraine with the Pyrenees district. The iron works of the Arège and the steel works of Boucau are hampered in their development by coal transport difficulties while the proximity of the coal mines on the Saar and the coke works of the Ruhr make it easy

for the metallurgical industry of Lorraine to supply the necessary fuel for its great furnaces. The Lorraine iron mines produce a yield that is not far short of fifty million tons of ore per annum.

Textiles and Sericulture

The textile industry has attained a high degree of development. Silk is one of the principal sources of wealth in France and plays an immensely important part in its export trade. The silk trade is carried on in the Lyons district not far from the "magneries" of the Rhone valley where in every farm and in every house the inhabitants rear silkworms.

Woolens are manufactured chiefly in the north and about Lille in the Ardennes (Selin) in Champagne (Reims) and also in Boston, Berry and Langue d'Oie. Hemp and flax are woven in the department of Nord and in Anjou, Maine and the Dauphiné. The cotton industry is carried on mainly in the neighbourhood of Rouen in the Vosges and at Saint Etienne.

The north and east of France is particularly rich in manufactures of all sorts. An enormous quantity of manufactured articles is produced there from the most costly dresses, furniture and perfumes to motor engines and chemical, not forgetting those famous "articles de Paris" which are without a rival in the world.

France's Fuel Shortage

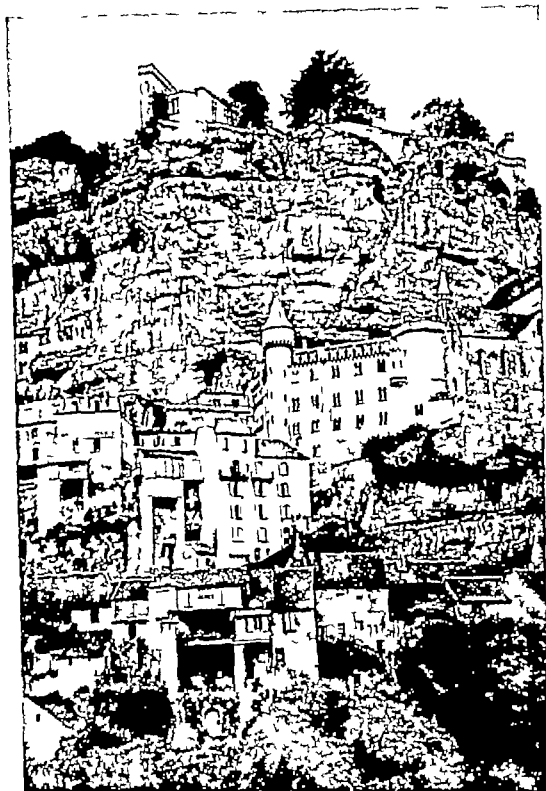
With an annual production of fifty million tons of iron ore France might become one of the greatest manufacturing countries in the world if only she could provide herself with a sufficiency of fuel, but as it is she has to feed her blast furnaces and foundries with coal from the Saar and coke from the Ruhr in order to deal with her immense quantities of ore. As a matter of fact France only produces 4 per cent of the world's annual coal yield, and she is obliged to import about 60 per cent of her consumption.



ON WINGS ABOVE CHAMONIX AND THE MONARCH OF THE ALPS

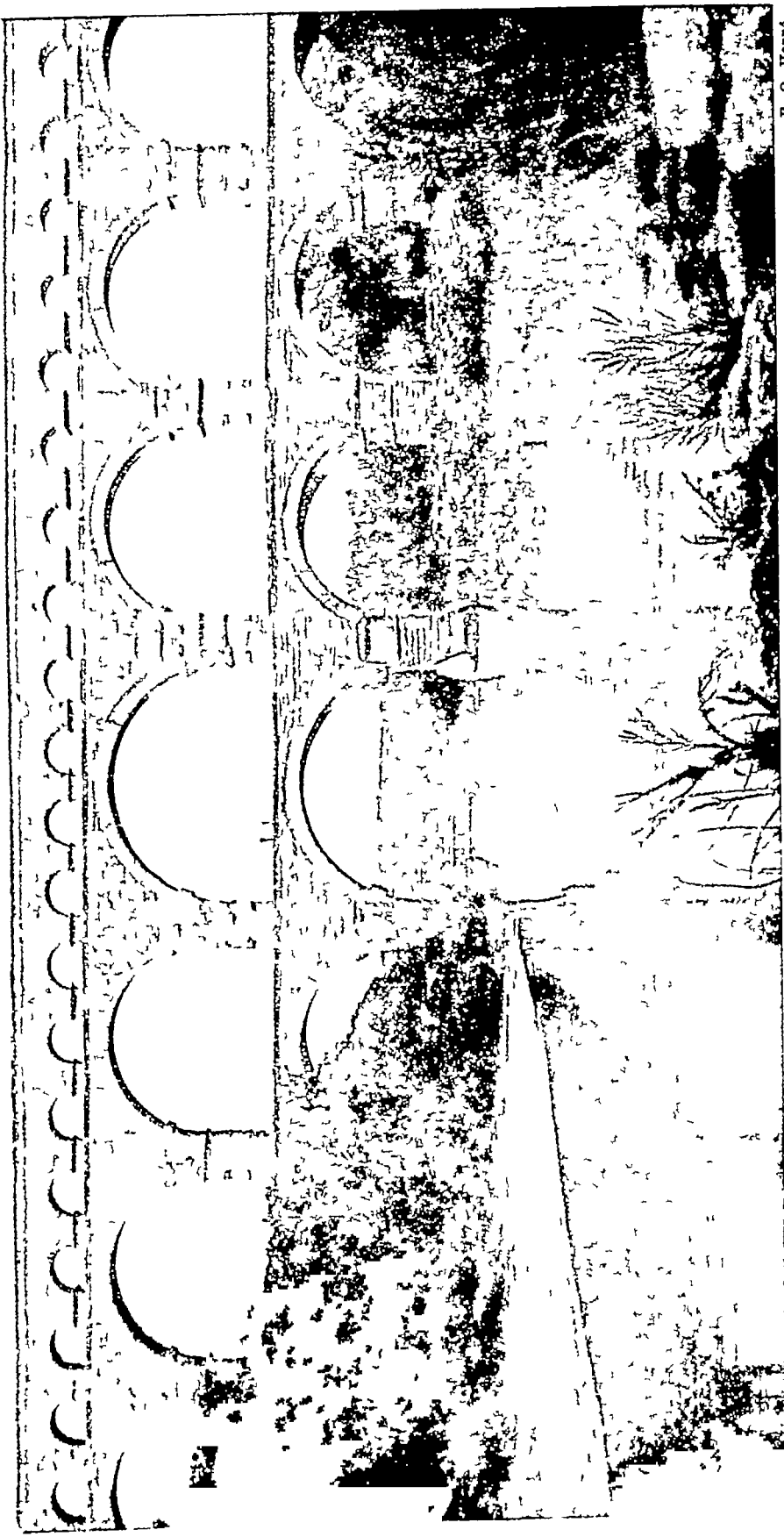
High above the floor of the valley the aeroplane whence this remarkable photograph was taken is flying in a south easterly direction. Immediately facing it is the stupendous Mont Blanc chain, rising to its immense height of 15,780 feet, one of the most magnificent spectacles in all Europe, while far below the little village of Chamonix straggles down the valley at the foot of the formidable heights

Ad Astra Aero



ONE OF THE MOST ANCIENT PILGRIM RESORTS OF FRANCE

The picturesque village of Rocamadour in the department of Lot is delightfully situated in the ravine of the Alzon, bounded by mighty cliffs 400 feet in height, and is one of the oldest places of pilgrimage in France. Its noted church of St. Amador and Chapel of the Virgin crown a high rock, reached by a granite staircase which pilgrims painfully ascend on their knees.



MAGNIFICENT ROMAN STRUCTURE OF THREE TIERS AND FIFTY-TWO ARCHES SPANNING A RIVER OF SOUTHERN FRANCE
Some 14 miles from Nîmes stands one of the grandest Roman structures in existence, the far famed Pont du Gard, it is part of an aqueduct 25 miles long, attributed to Vipsanius Agrippa, son in law of Augustus who founded Nîmes, and was built to conduct the waters of the Eure and Airon to the city. Admirably constructed of huge blocks of stone without cement, the bridge, spanning the Gard at a bend of the beautiful valley, is 880 feet long and 160 feet high and has three tiers of arches, the top tier consisting of 35 small arches, the second tier of 11 and the third of six arches

E O Hoppe

Before the Great War the imports and exports almost balanced one another in value but considered from the point of view of weight the exports are only 28 per cent against 72 per cent imports. France sells to England two million quarter gallons of wine.

The most important trade relations of France are with Great Britain, which takes over 20 per cent of her exports and sends her over 12 per cent of her imports. France is the third best customer of Great Britain after India and the U.S.A.

With a surface of 212,659 square miles France has a population of 39,210,000 to which must be added 850,000 living in the colonies and 578,000 living abroad. The colonies possessions and protectorates of France cover a surface of 4,537,000 square miles with a population of 92,000,000. It is estimated that French is spoken by about 70,000,000 people.

Balance of Economic Forces

The Frenchman does not willingly leave his country. The population remains practically stationary and this condition of affairs gives rise to no little anxiety. Nevertheless, certain economists and experts regard this stability as one of France's principal assets, as it means that she limits herself to the population which she is able to support. Now France as regards food, is practically self-supporting, which is tantamount to saying that one-half of the population feeds the other. This equilibrium of forces is of incomparable value from the economic point of view.

Though France forms so wonderfully harmonious an entity there are, as we have seen, strongly marked differences within her borders, particularly between the north and the south. The essential unity of France is, if we may so put it, the result of a number of strongly contrasted elements. Northern France by reason of its general characteristics is as it were, a great circle round about Paris, the common centre, the focus of the fluvial system and of the

valleys through which the roads and later on the railways made their way.

The characteristic of the French Republic is a powerfully centralised administration and all state affairs are directed from Paris. Paris is the residence of the President of the Republic. In Paris sits the Parliament (Chamber of Deputies and Senate). In Paris are found all the ministries, the Embassies, the Cour de Cassation or Supreme Court of Justice, the Conseil d'Etat which organizes the details of public administration and interprets the application of administrative law, the Cour des Comptes, the controlling body of state expenditure and the Academies, representing literature, science and the arts.

Administrative Divisions

Before the Revolution of 1789 France was divided into 33 provinces. But the *Assemblée Constituante* proceeded to carry out a fresh division by splitting up the country into departments. This division is still the basis of the administrative government of France. There are at present 89 departments. At the head of each is a *Préfet* who represents the government and is assisted by a *Conseil Général* elected by the inhabitants of the department.

Each department is divided into *arrondissements*, with a *Sous-Préfet* and a *Conseil d'Arrondissement* also elected by the inhabitants.

Best Roadway System in the World

Each *arrondissement* is divided into cantons, each canton into communes. The commune is ruled by a *Conseil Municipal* elected by the inhabitants of the commune and presided over by a mayor. There are 36,000 communes in France.

France is reputed to have the best system of roadways in the world. They total 37,000 miles, and are divided into three categories: the routes nationales, the routes départementales and the chemins vicinaux. The first are maintained by the state, the second by the

departments and the third by the communes. The waterways, natural or artificial, have a length of 8,437 miles. The water transport is equal to one-third of the railway transport. The regularity of the water-flow and the level nature of the country has made it possible to create in the north a very close network of canals. Moreover, the north is a region in which industrial and agricultural activity is particularly intense and where the coal-mines are most numerous. Coal alone furnishes a large proportion of the material transported.

A glance at the different railway systems of France will show better than anything else the importance of Paris as the real centre, or rather heart of the country, for it must be realized that Paris is situated in the north. There are 30,800 miles of railway in France against a total mileage of 20,155 in Great Britain. In 1857 the numerous small companies amalgamated into six big groups. One of them is now owned by the state, the five others are owned by companies.

At present the air-port of Le Bourget, near Paris, is a centre of radiation for a whole cluster of great air routes, and the various air lines have amalgamated in a single company under the name of the Air Union.

Ever since its inception the air service to Morocco has made uninterrupted progress and since 1922 there have been daily departures from Toulouse. There is also an extension from Casablanca to Oran and services from Algiers to Biskra and from Dakar to Keyes in Senegal.

By a well-devised scheme of premiums and subsidies the state contributes to the prosperity of the air lines and to their extension and development.

The harmonious variety of her provinces with all the gradations of a temperate climate, as well as all kinds of landscape, soil, vegetation, her agriculture and industry more evenly balanced than in any other European country, all this multiplicity of cause and effect distinguishes France from the other great civilized nations of the world.

FRANCE GEOGRAPHICAL SUMMARY

Natural Divisions. The Central Massif, the heights of Brittany, relics of the oldest mountains of Europe. Four river valleys—Seine, Loire, Garonne, Rhône. Paris Basin is roughly the valley of the Seine. Pyrenees and Alps on the boundary are parts of the great Eurasian east-west mountain system. In the north-east France contains part of the Rhine—Moselle-Meuse-Schelde system, physically an intermediate boundary zone.

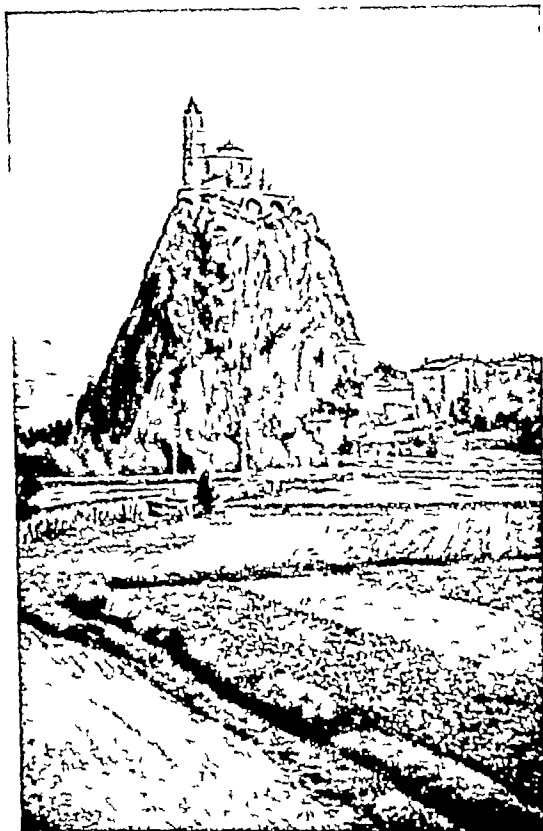
Climate. West European in type except in the south-east, where Mediterranean characteristics penetrate from the south, mainly up the Rhône valley.

Vegetation and Crops. Forest on the higher ground, cultivated on the lowlands. The best wheat grower in Western Europe. Sugar beet, oats, in the north, grapes, olives, mulberry leaves, in the south. Fodder crops for the widespread domestic animals, and hence independence of foreign supplies of meat.

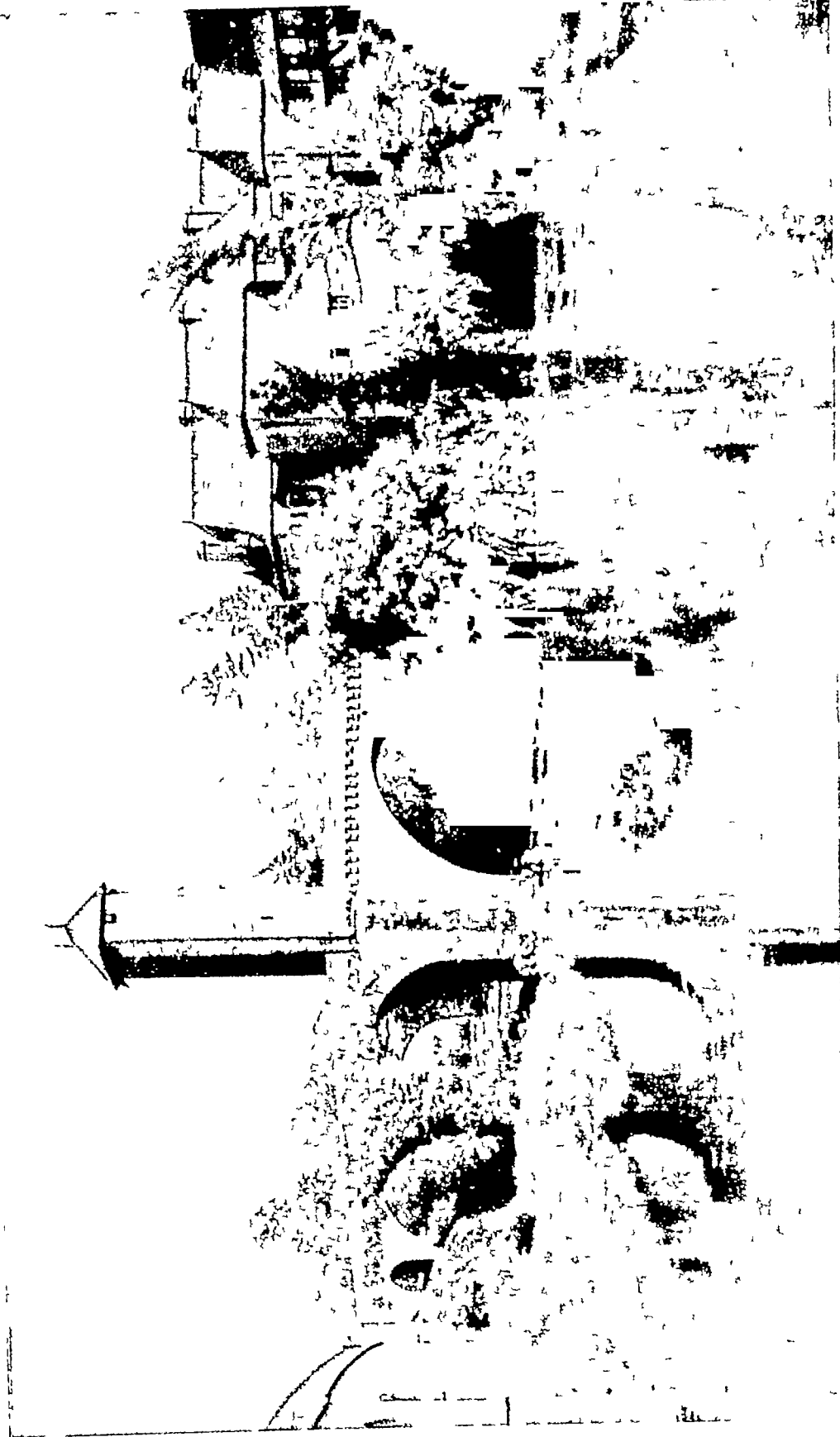
Products. Coal and iron, on the eastern edge of the Paris Basin, promise a great development in the metallurgical industries. Potash in Alsace. Textiles—cotton and wool in the north-east, silk in the Rhône valley. Wine in Champagne, Burgundy and Aquitaine.

Communications. Peripheral coast ports—Havre, Nantes, Bordeaux and Marseilles are the termini of the main routes radiating from Paris. The Havre route includes the ferry towns—Dieppe, Boulogne, Calais—and leads to London and the Atlantic service. The Bordeaux route leads direct to Madrid, the Marseilles route opens to the Mediterranean. In addition land routes to Belgium, to the Danube and Vienna, to Switzerland and Italy take advantage of openings in the land frontier. The gates of Toulouse and Burgundy provide for cross-connections. The rivers are not so useful as the Elbe or Rhine, but the canal system, especially from the Seine to the Low Countries, is of considerable importance.

Outlook. France is the nearest approach in Europe to a self-contained country. Her position with reference to her great African dominions across the Mediterranean Sea may be regarded as a complement to her strong economic position. Security on the intermediate eastern frontier is a prime necessity. With that guaranteed, France has a measure of independence which is only comparable with that of the United States.



FRANCE. Perched on a middle point of volcanic rock the church of St Michel d'Aiguille is the glory of Le Puy in the Haute Loire



FRANCE Orthes on the Gave de Pau in the Basses Pyrenees is a modest town to-day Little but this medieval bridge survives of the gay city where Gaston Phoebus held the splendid court painted by Froissart



FRANCE. *Buccinella Valen* and *Lele* is still in London, the eighth time in six years, and for the first time in the night and the morning. Here in the D. fill the streets with the most beautiful flowers.



FRANCE *In its 300-mile course from Puy de Dôme to the Garonne the Dordogne flows through the fairest scenery in south-west France*

Underwood



FRANCE. Craftful skill and a touch of poetry are given to the roads in France by the poplars that line them on either hand



E N A

FRANCE Some of the finest scenery in the Pyrenees is to be found in the Vallee d'Ossau between Arudy and Gabas At the head of the valley is the sharp Pic du Midi d'Ossau rising to a height of 9,465 feet



FRANCE. Marcellous engineering feats have opened a way for traveller from Grenoble to the mountains
Viaducts spanning rifts in almost sheer cliffs afford entrancing views over the valley of the Drac



GENEVA

Lakeside City that Has Led the World

by Francis Gribble

Author of "Lake Geneva and its Literary Landmarks"

THE area of the Canton of Geneva is only 108 square miles. Its population in 1920 was 170,000, the population of the city at the same date being just over 135,000. They are insignificant figures, but the interest and importance of the place have always been out of all proportion to its size. The eyes of Europe were already focused upon it when it was a little larger than Bisleford and not quite as large as Barnstable. It has a unique situation and has had a unique history.

Built on the banks of the Rhône, where swiftly as an arrow it darts from the lake, the city follows the course of the river toward the point where the brown muddy stream of the Arve descends from the Savoy glaciers to mingle with its blue waters. It has also expanded along the shores of the lake in the direction of the French frontier on the one hand and the Canton of Vaud on the other. The pine-clad slopes of the Jura rise behind it, while from the lake front one looks up at the dark ridge of the Salève (now climbed by a mountain railway) and sees in the distance the imposing snows of Mont Blanc, first visited by tourists from Geneva—William Windham of Felbrigg in Norfolkshire and Dr Pococke afterwards Bishop of Meath—less than two hundred years ago.

Old Town Obscured by the New

To the seeker after architectural antiquities the place is apt to be disappointing. New buildings predominate, palatial hotels lining the lake shore, white blocks of residential flats, broad boulevards worthy of Paris, large shops stocked with all kinds of merchandise and particularly well stocked with

jewelry and furs. The new town in short wamps the old, and much of the old town—never much larger than Sandwich—has been demolished. Great fires, relatively as disastrous as the Fire of London, destroyed a portion of it. Italian stonemasons have been called in to attack the rest and set up huge buildings of uniform ugliness, replete with modern conveniences in place of the picturesque but insanitary dwellings of the past. Visitors who come to Geneva on shopping expeditions may spend a long time there without discovering that it contains any old town worth attending to.

Where to Find Old Geneva

Still something of the old town does remain, albeit masked by this façade of modern masonry.

On the south side of the Rhône rises a hill—rather steep, but not very high—covered with houses and crowned with the towers of a cathedral. Old Geneva is over there and up there—more particularly up there. One can if one likes, ascend to the highest point by a flight of steps—the *Després des Poules* (in the cathedral)—which recalls an earlier age. The hill was once fortified, the harbour being defended by a boom and the gates used to be locked at night. Was it not because he found himself locked out that Jean Jacques Rousseau ran away from home and embarked on his career of adventure?

The walls were pulled down in 1848, but the *Promenade des Bastions* still reminds us of them and various old buildings packed pretty closely together recall various old memories.

Most notable among them is the cathedral itself, a Gothic building to

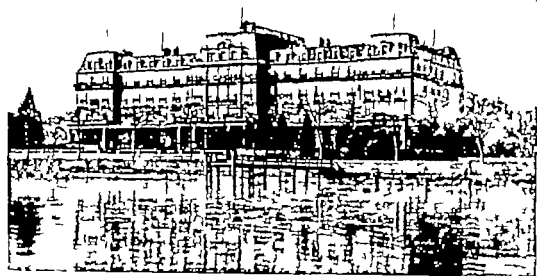
colleges. A little further removed is the town hall of Florentine architecture approached by an inclined plane instead of a staircase enabling the town councillors—grave ponderous and portly men—to be carried to their seats in litters. It was in one of the halls of this building that the arbitrators delivered their judgement in the famous Alabama case.

Just opposite is the Arsenal with its Historical Museum and some of the relics exhibited there recall the memories of a very proud day in Genevan annals.

Geneva it must be premised became an independent republic early in the fifteenth century as the result of a revolt against the rule of the Duke of Savoy. The struggle dragged on for a good many years and produced its martyrs. Philibert Berthelier whom the duke beheaded and to whom a memorial has been erected on an island in the Rhône. Jean Pécolat whom the duke caused to be hung up in an absurd posture in his banquet hall in order that he might watch him wriggling while he dined and Bonivard who suffered durance as the Prisoner of Chillon. But in the end the duke was ejected

The memory of the ejection rankled. The recovery of Geneva continued for nearly eighty years, to be the fixed objective of the foreign policy of Savoy and at last in 1602 Duke Charles Emmanuel of Savoy made a desperate and treacherous attempt to rush the town at the dead of night. That enterprise is known as the Escalade and the anniversary of its ignominious failure is still the occasion of annual rejoicings—a procession attired in the costumes of the period passing through the streets and a proclamation commemorating the event being read by torchlight. And in the Arsenal Museum one is shown not only the captured scaling ladders but also the cauldron which a worthy woman who was making soup for an early breakfast pitched, with its scalding contents, out of an upper window on to the head of one of the duke's soldiers, to his great discomfiture.

That perhaps is all that need be said about the topography of the old Geneva. Readers who wish to follow up the subject must be referred to the works of the local antiquaries. But one may remark before going on to speak of contemporary Geneva that the city



Central Sea

STATELY HEADQUARTERS OF THE LEAGUE OF NATIONS, GENEVA

This imposing building, the Palais des Nations, formerly the National Hotel, is now the seat of the League of Nations established by the Treaty of Versailles, 9-20. Geneva has initiated many humanitarian movements and the choice of this cosmopolitan city as the headquarters of the League of Nations was recognition by the Powers of its long record of international significance.

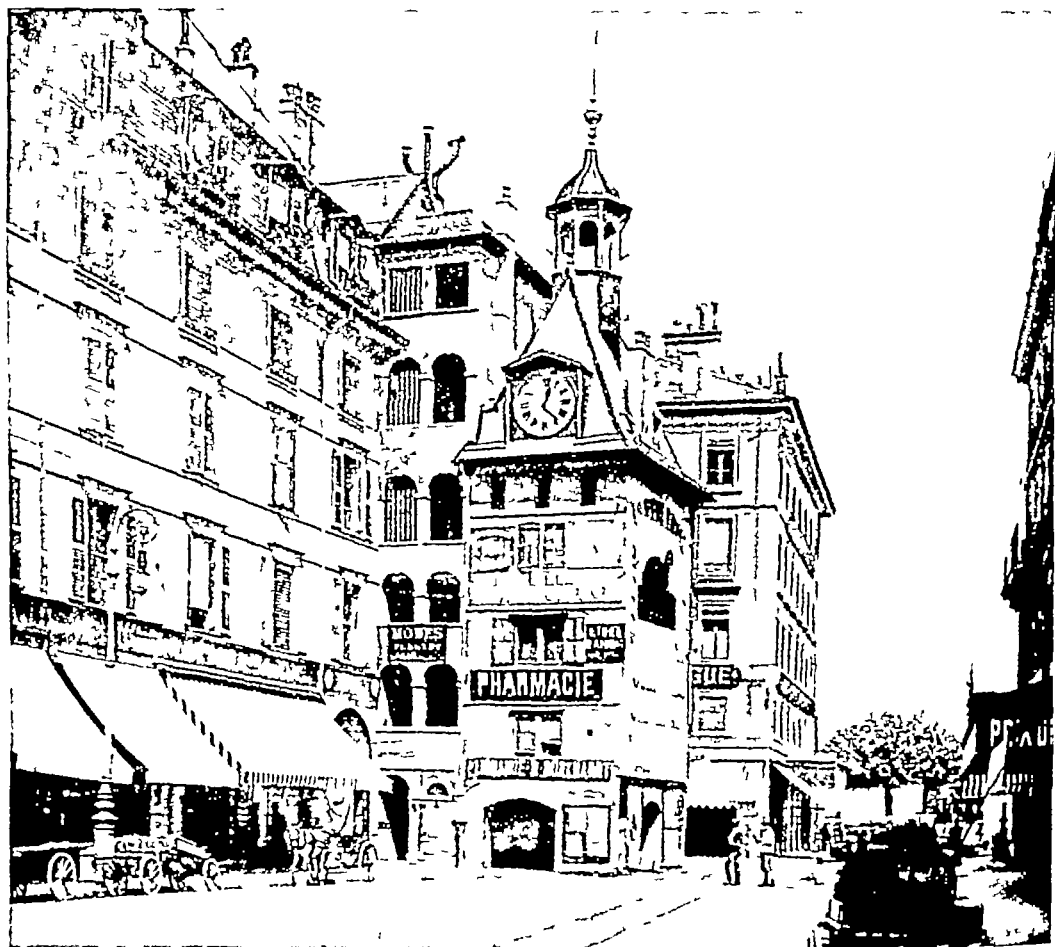
has gradually shaken off the theological and Puritanical fetters which Calvin imposed upon it, and which caused John Knox, who took refuge there from the persecution of the Bloody Mary, to speak of it as "the most perfect school of Christ that ever was in the earth since the days of the Apostles"

Not only does it possess a monument nowadays in the Salle de la Réformation to Calvin who burnt Servetus, but another near the Hôpital Cantonal to Servetus whom Calvin burnt, and the last of the fierce theological controversies which have shaken Geneva was that which raged over the wording of the inscription to be placed on the memorial. To such a pitch did tempers then rise that a local wit

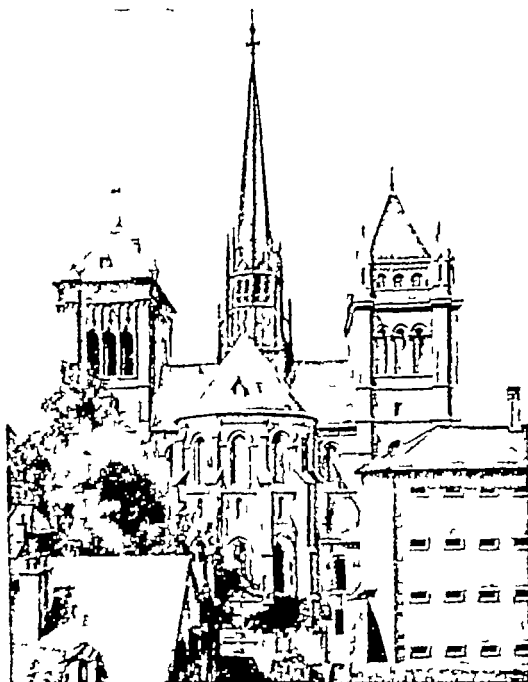
proposed that each of the parties to the dispute should be assigned a separate slab on which it should be free to inscribe any sentiment that it chose

Meanwhile the theatre, banned by Calvin and several succeeding generations of pastors, had established itself in the town, thanks largely to the civilizing influence of Voltaire and M de Beauteville, the French ambassador, and now there is not only a theatre but a kursaal, in which a mild form of gambling is permitted

Divines thundered their objections to both institutions. As the result of the dramatic representations, they declared, young men and young women would "occupy themselves with nothing but comedy and vainglorious display," and



OLD CLOCK TOWER GIVES THE TIME OF DAY IN PLACE DU MOLARD
The Place du Molard lies near the Rue du Rhône, a busy thoroughfare running parallel with the Grand Quai. The Clock Tower recalls to mind a notable industry of Switzerland, for clock and watch making, closely identified with the country, is given a place of honour among national industries, and since its introduction in 1587 Geneva has kept her reputation for fine watches

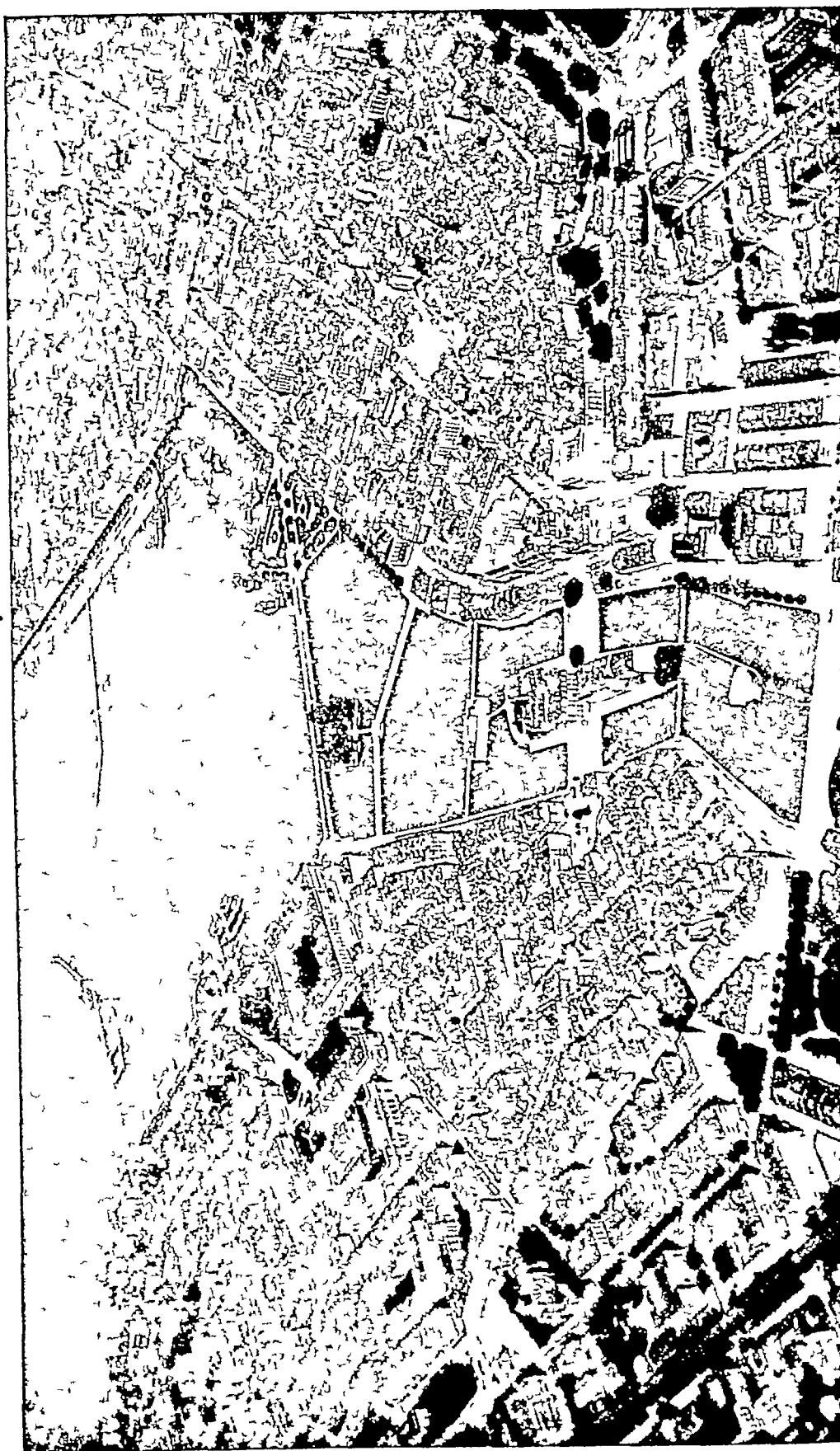


VIEW OF GENEVA'S FAMOUS PROTESTANT CATHEDRAL

Standing on the highest point of the city, the Cathedral of St. Pierre with its graceful pure form, on present and dignified lines. Founded in the 11th century, it was rebuilt a traditional Gothic structure in the twelfth and thirteenth, though most of the walls and towers date from the early days, and Renaissance additions were added in the eighteenth century.

"libertine behaviour" would take the place of modesty and chastity. The opening of the kursal they predicted would attract an undesirable class of visitors and thereby corrupt the simple morals of Geneva bank clerks and shop assistants.

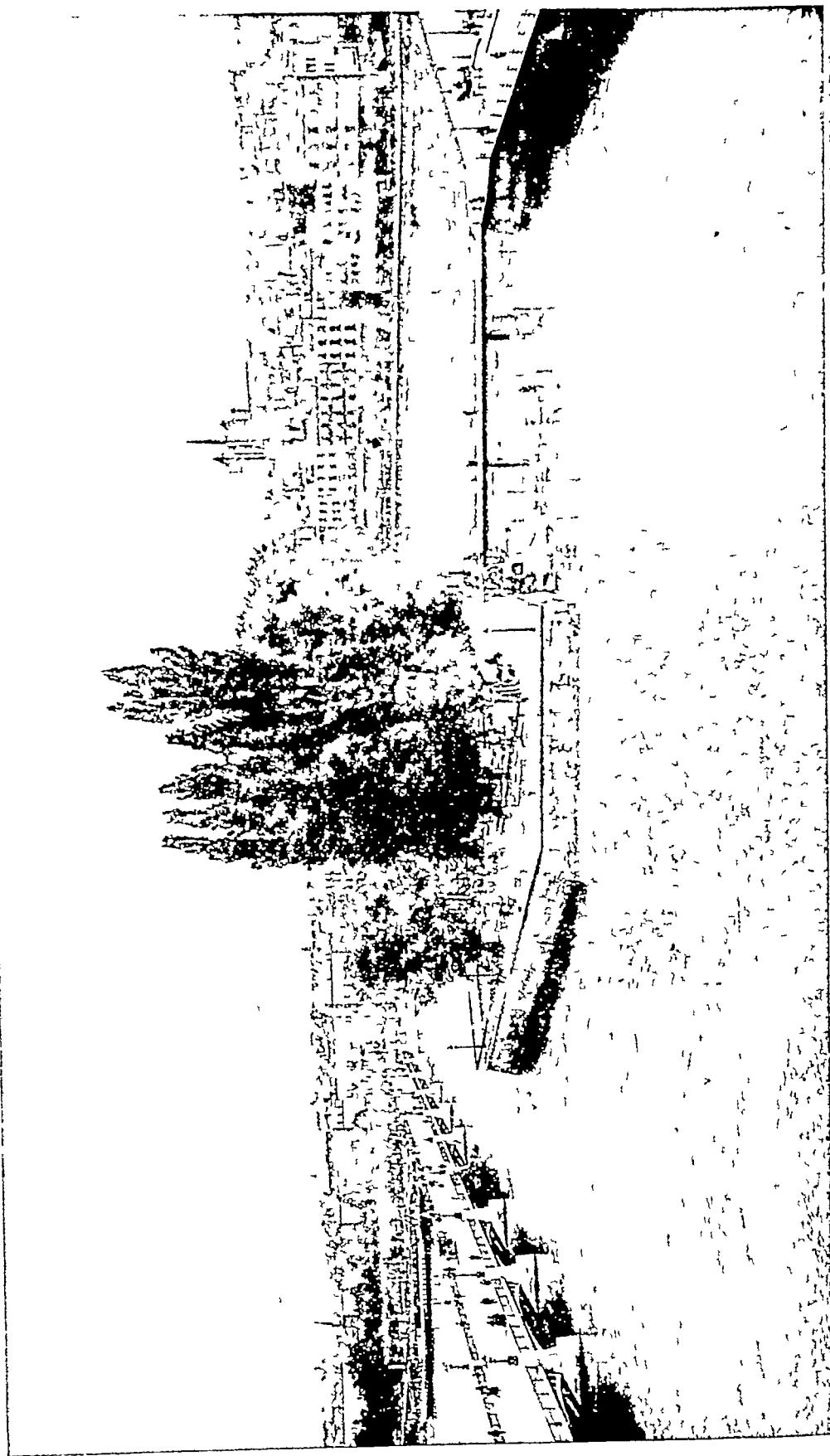
Experience however has happily proved these fears to be unfounded. In spite of its distractions, Geneva remains a very serious city. Its abiding enthusiasm for education is attested by the fact that no less than one third of its annual budget is devoted to the



Ad Astra AOTO

STRIKING SPECTACLE OF GENEVA LYING LIKE A RELIEF MAP BENEATH THE AEROPLANE'S WING

Emerging from the lake of Geneva the Rhône divides the town into two parts, the old part, which is the more important, being the commercial centre, lies on the left bank. Since the middle of the nineteenth century Geneva has grown rapidly, breakwaters have been constructed to protect the harbour and commodious quays line both river and lake. Here are plainly visible the two divisions of the city and five of the seven connecting bridges, headed by the imposing Pont du Mont Blanc, while the Jetée des Paquis and the Jetée des Eaux-Vives are seen like fine silver bars cutting the glassy surface of the lake.



Swiss Federal Railways

VIEW ACROSS THE RHONE OF THE OLD TOWN OF GENEVA LYING ON THE LEFT BANK OF THE RIVER

Where the swift waters of the Rhone issue from the lake of Geneva, the Pont du Mont Blanc, seen on the left, stretches from bank to bank connecting the Quai du Mont Blanc—which commands a fine view of the snow clad peaks of the Monarch of the Alps—with the Place du Lac and the Grand Quai. It is 275 yards long and was constructed in 1862 and widened in 1903, behind it in mid stream is the Rousseau Island, adorned with beautiful trees and a bronze statue of Geneva's illustrious son, Jean Jacques Rousseau, and united to the Pont des Bergues by a footbridge.

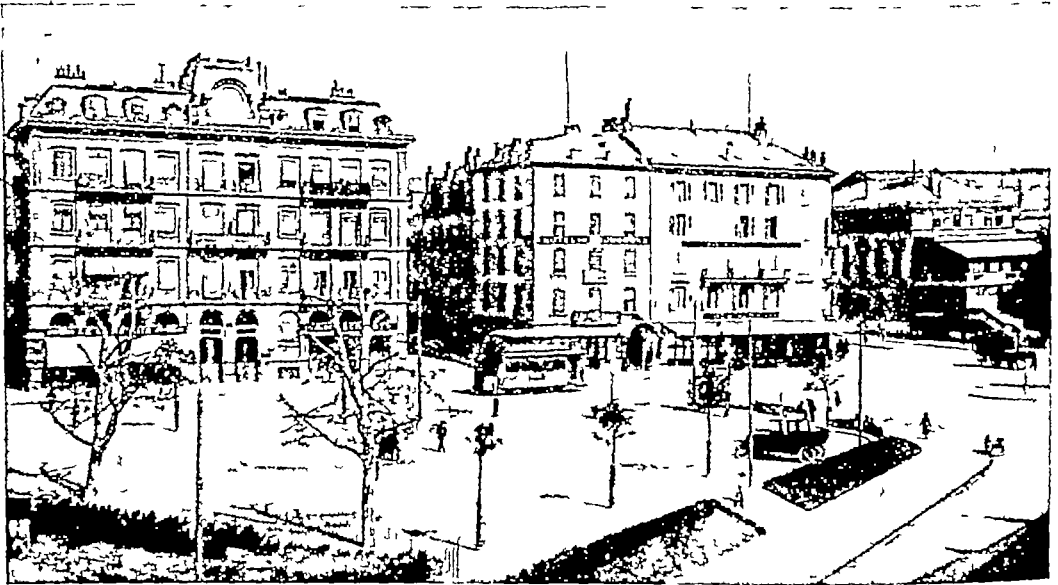
narrow strip of territory gave Geneva its increasingly cosmopolitan flavour, while the traditional discipline of the place, modified though it was by the moral and intellectual progress of the world and by increasing intercourse with neighbouring peoples, generally prevented their activities from becoming mischievous, and turned cosmopolitan tendencies into channels profitable to humanity at large

Rousseau's influence—his statue can be seen on Rousseau Island—began to count for more than Calvin's. The philosopher was as proud of having been born a citizen of Geneva as of having become the apostle of the Rights of Man. His "Vicaire Savoyard" has been described as "a faithful likeness of a young Calvinist pastor," albeit a Calvinist who had lost his creed. His spirit inspired the Red Cross Movement, initiated after the battle of Solferino by Henry Dunant, the Puritan mystic.

Other humanitarian efforts in the interest of such oppressed peoples as Greeks and Armenians were launched at Geneva in the course of time. International disputes, like the Alabama trouble, were brought there to be

settled by arbitration, while during the Great War Geneva became the clearing house for the correspondence of prisoners of war, as well as of other movements for the mitigation of the horrors of strife. So it came to be said with perfect justice of the Genevans: "Their state is the Republic of Man, of man who being himself emancipated, yet proclaims himself the brother of the rest of humanity."

That is the record which made Geneva a more appropriate site than Brussels, or even The Hague, for the headquarters of the League of Nations. Not only is it more cosmopolitan than either of these rival capitals—it is also more disposed and better qualified to resist the political or social pressure of any interested power. Consequently, when the choice of the powers fell upon Geneva, it was generally admitted to be the best choice that could have been made, and little attention was paid to the protests of rival claimants to the distinction, and there the League is firmly established, with its Council, its Assembly, its committees and its sub-committees, and its grave deliberations in the Palais des Nations.



QUIET CORNER IN THE PLACE DE CORNAVIN, GENEVA

There are few public structures of outstanding interest in Geneva, despite the fact that the city is a famous religious, educational, scientific and literary centre. The principal secular buildings include the theatre and Athenaeum, numerous museums, a sixteenth century town hall and an academy founded by Calvin. The Place de Cornavin lies on the Rhône's right bank.

Mid-Europe's Far-stretching Lowlands

by W H Dawson

Author of "Germany and the Germans, etc.

THE physical aspect of North Germany is that of a general unity in spite of all diversities. Nature might seem to have gone about her work in that region in no haphazard way—her rough tools have been fire and water with convulsion and cataclysm of all sorts, but the result is a certain organic completeness, represented to-day by a congeries of territories which form both geographically and hydrographically a fairly well balanced and self-contained system.

Politically North Germany as here understood, comprises almost all the states grouped by Bismarck in the North German Confederation created in 1867—in other words, the whole of Germany with the exception of part of the Rhine Province, Bavaria, Württemberg, Baden and Hesse. The territorial boundaries of this area are in the east Russia and Poland; in the south three of the German states just named, with Czechoslovakia in the south-east; in the west Holland and Belgium; and in the north Denmark.

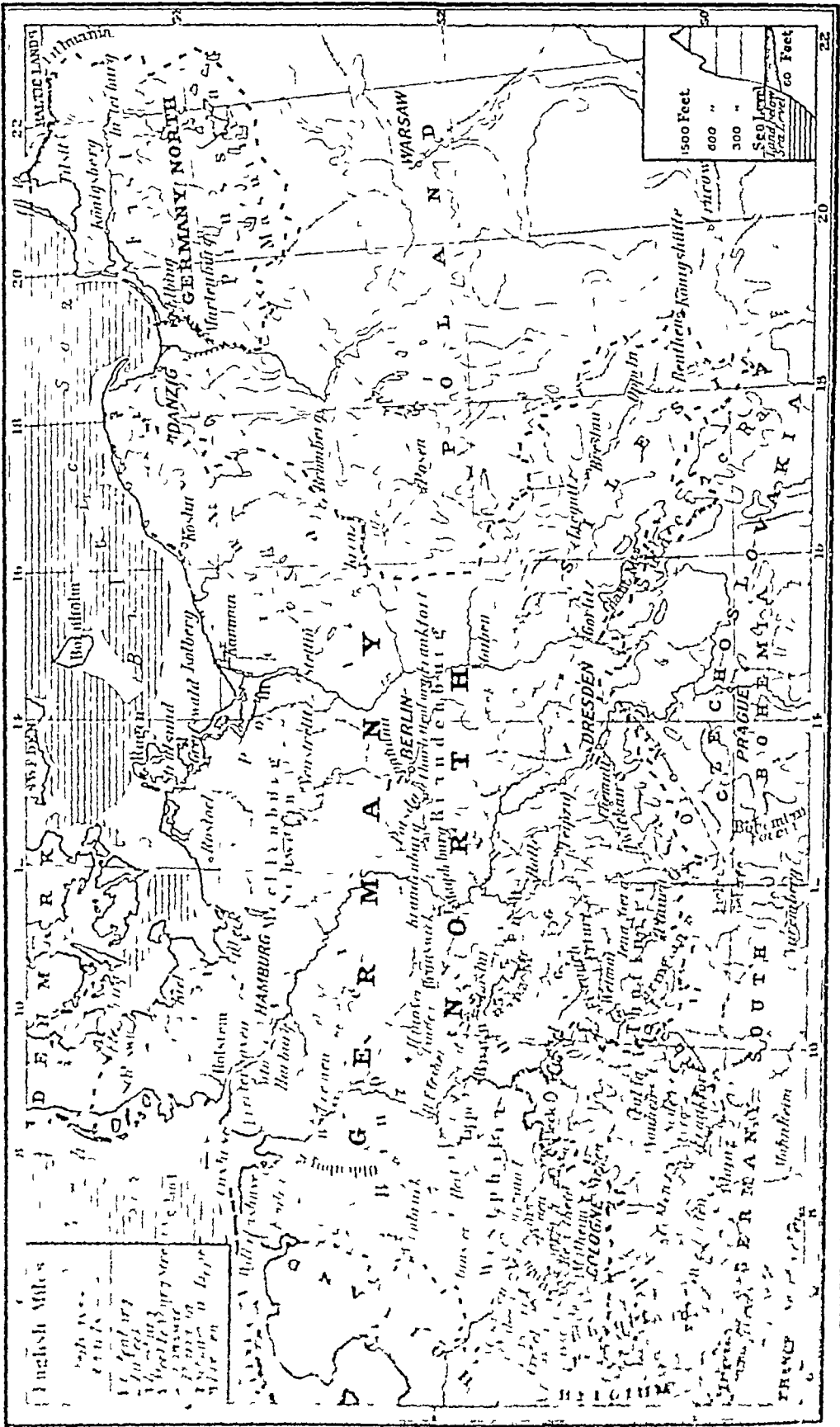
Eclipse of Old Monarchies

Prussia with its twelve provinces, naturally predominates in North Germany, being twice as large in area and nearly four times as large in population as all the other states put together; while Saxony to the south, follows at a great distance both in size and number of inhabitants. The other states are Mecklenburg-Schwerin on the Baltic, with Mecklenburg-Strelitz to the east of it; Thuringia in which seven of the old duodecimo states of Central Germany have been amalgamated; Oldenburg lying west of the Weser with a broad frontage to the North Sea; Brunswick, Anhalt, Waldeck, the Lippe, all these

five being enclaves in Prussian territory and the Free Cities of Hamburg (treated elsewhere), Bremen and Lübeck. All the old monarchies, whether kingdoms, grand duchies, duchies or principalities, have been reorganized on a republican basis and to-day are known for the most part as Free States, though in some of them the monarchical spirit is still strong and only awaits a favourable opportunity for reasserting itself. The combined area of the North German territories is about 242,000 square miles and its population 43½ millions, or over two-thirds that of the whole realm. The ratio of the Protestant to the Roman Catholic population is about three to one, but in the Prussian provinces of the Rhineland, Westphalia and Silesia the latter are in a majority.

Dividing Backbone of Ranges

The most distinctive physical features of the country are a vast lowland, spreading out to the sea coast from Central Germany, and behind it the backbone of mountain ranges which divides North from South Germany and serves as a sort of stepping-stone to the high Alps. Starting in the west from the Ardennes, on the Meuse the first range of the series comprises the Slate Mountains of the Rhine basin—of which the Hohe Venn, Taunus, Hunsrück, Rothaar, Eifel and Siebengebirge (Seven Mountains) reach heights of from 1,500 to 2,500 feet. The mountains of Thuringia, rising in places to nearly 3,000 feet, follow with isolated ranges like the Harz and Rhön lying north and south-west respectively, and beyond them to the east stretch the massifs of the Fichtelgebirge, the Ore Mountains and the Giant Mountains, with elevations ranging from 4,000 to over



CHIEF TOWNS AND COMMUNICATIONS OF NORTH GERMANY AND ITS COASTLINE WASHED BY TWO SEAS

5,000 feet while in the south are the Frankish Jura and the great Bohemian forest. A small mountainous district lying a little north of Dresden where rocks, forest and river combine to make some of the most picturesque scenery in North Germany has been given the complimentary name "Saxon Switzerland". The district between the Rhine

Sea. These main waterways however form only a small fraction of the German river system. For the secondary rivers and tributaries number nearly 150.

On the North Sea Germany has a seaboard whose greater part falls to Schleswig Holstein while its Baltic coast has a length of 850 miles. Both west and east of the peninsula



F. von Gahlen

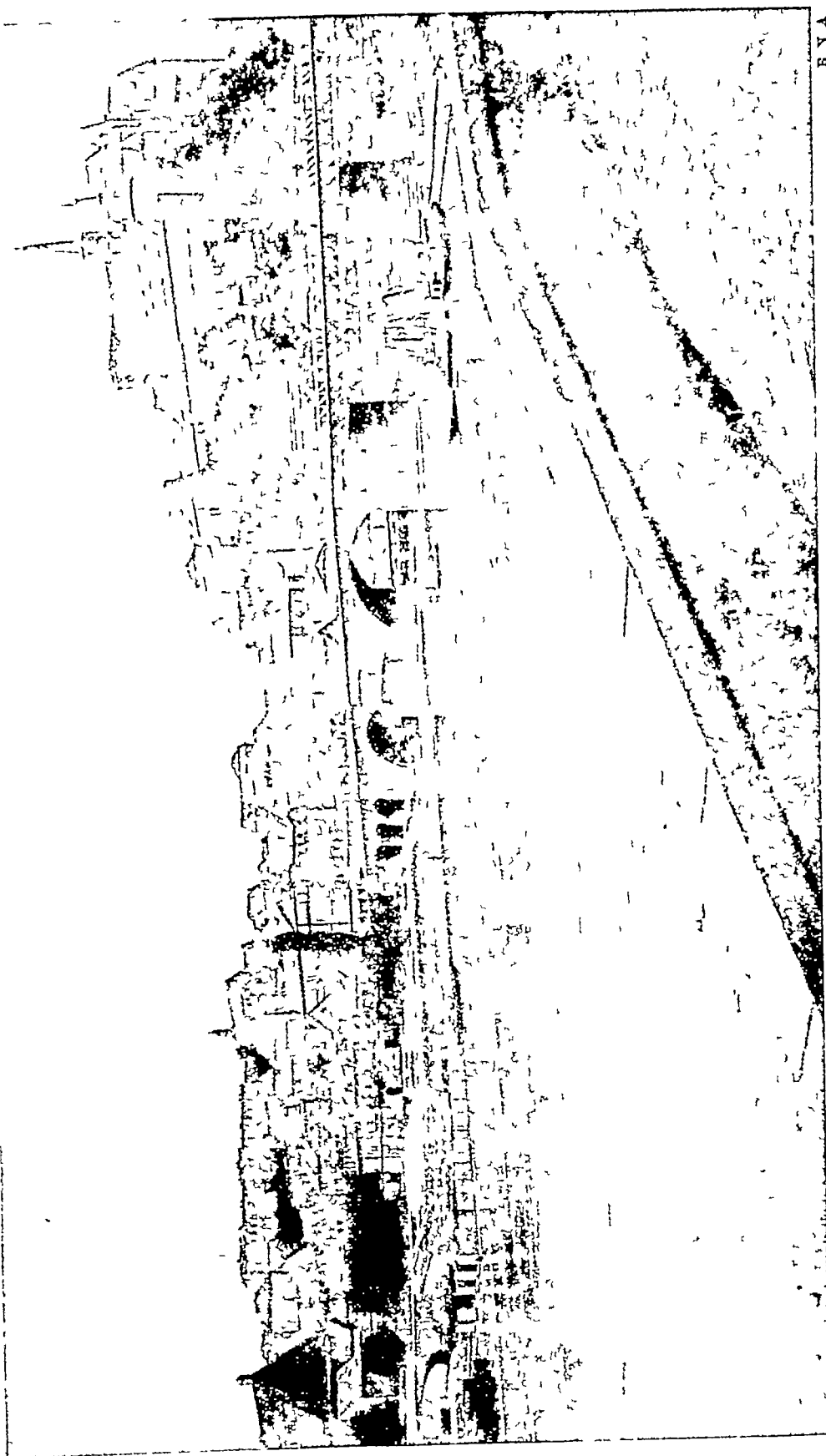
LUEBECK CATHEDRAL LOOKING OVER THE MUEHLENTEICH

One of the three independent Hanseatic towns, Luebeck stands on the Trave about ten miles from its mouth. A important seaport it is a considerable manufacturing centre, in addition to shipbuilding, leather and clothing, cigars and machinery are manufactured. The city still contains reminiscences of its medieval age, in its lofty towers and its ancient gabled houses.

Elbe and Harz is regarded as the cradle of the earliest Germanic settlement.

From the Central German highland five of the six great rivers of Germany issue into the vast northern plain through which with many meanderings they find their way to the North and Baltic Seas. Into the former flow the Elbe, Weser and Rhine; the Baltic receives the Memel or Niemen, Vistula and Oder; while the Danube though rising in Germany issues in the Black

which divides the two seas are many islands, mostly of small size, the best known being Heligoland in the North Sea and Rügen in the Baltic. The outline of the Baltic coast is broken by many picturesque bays and creeks spreading far inland, and characteristic of the same coast are the freshwater luffs or lagoons, several of large extent lying behind narrow belts of sand thrown up by the rivers. A striking feature of the Baltic hinterland are the lake



E V A

LOOKING ACROSS THE ELBE AT MEISSEN'S SPLENDID GOTHIC CATHEDRAL AND THE CASTLE OF ALBRECHTSBURG

On both sides of the Elbe about 15 miles north west of Dresden lies Meissen, one of the most ancient towns in Saxony and widely noted for its manufactures, especially porcelain. The celebrated Royal Porcelain Manufactory founded in 1710 is the oldest in Europe, formerly in the Albrechtsburg, it was later transferred to the neighbouring valley of the Triebisch. The Schlossberg, seen on the right beyond the Alte Brücke or Old Bridge, rises 105 feet above the town and is crowned by the stately cathedral begun in the thirteenth century and the Albrechtsburg, a fine castle erected in the fifteenth century, containing handsome vaulting and staircase

districts, of which three are particularly noteworthy—those of East Prussia, Pomerania and Mecklenburg. Still there is a smaller, though very romantic cluster of lakes. Farther inland some smaller rivers like the Spree and Havel also form lakes of considerable size in the course of their sluggish wandering seaward, and the former of these streams in passing through a district known as the Spree Forest south of Berlin serves for some distance as the only highway for traffic. The lakes and brooks of North Germany hug a small number of East five hundred

climate and the severer and longer are the winter months until in the extreme north-east Russian conditions may be said to prevail. Here winter begins as a rule early in December though often in November and last until March or April when the rivers are fast frozen for several months together and water communication with the outer world altogether ceases.

Climate: a Contrast of East and West

Owing to the difference of seasons field work which can be continued in the Rhenish lowlands until far in December to be resumed in February is normally suspended or at least interrupted in the eastern provinces from November until April owing to frost, snow and rain. In the more inhospitable parts of these provinces the period of vegetation lasts only for four or five months. The rainfall is also heavier and more equal throughout the year in the west than in the east where large areas regularly suffer from drought in what should be the growing season.

Fauna of the Forests

Features of the Great North Plain

Except in the west the North German plain presents a considerable degree of uniformity alike in physical features and climate. No mountain ranges and comparatively few hill breaks the monotony of the great sandy lowland. The river valleys though not without attraction, have little of the charm and poise of the romance of the valleys of the Rhine country and a large part of the surface is given up to forest and corn-growing. The lowest part of the plain are in the east where the overflow of the rivers Oder, Spree, Havel, Netze and Warthe has converted vast tracts of country into swamps. In the west are large expanses of moorland and heath of which the best known are the Lüneburger Moor, the East Frisian Moor and the Bourtanger Moor. Much of this moorland is so swampy as to be impassable while the sterile nature of the soil elsewhere makes its cultivation unprofitable.

The effect of altitude and climate is to create a marked differentiation between the vegetation of North Germany and that of the South, the flora of the higher mountain districts taking a sub-Alpine and in part an Alpine character which is altogether absent from the northern plain. Much of the hilly country is thickly covered with forest though in proportion to area North Germany is not so rich in trees as the South. Large areas of forest are owned by the states and by municipal authorities, which cultivate them on strict commercial principles and derive a considerable revenue from the sale of timber. Coniferous trees predominate in the east while in the west and on the coast there are extensive forests of beech, oak, ash and elm.

There is great variation in the climate of North Germany as between west and east. The warm winds from the Atlantic give to the western districts an advantage enjoyed in but small measure by the eastern with the result of a difference of at least ten degrees in their mean annual temperatures. The most genial climate in Germany is found in the valleys of the Rhine and its tributaries in the west while the farther one goes eastward from the Labe the rawer is the

Many representatives of the early wild fauna still roam the mountain and forest regions of North Germany. The beaver, badger, otter and fox are common

the wild boar and the wild cat infest the larger forests, and the mink and even the wolf are occasionally seen in north-eastern Prussia. Much has been done by restrictive forest laws and a singularly efficient state forestry service to preserve from extinction such interesting survivals of the olden chase as the stag, elk, roe and wild boar.

Bird Life in the North-East

Except in the pine and fir districts bird life is abundant, and the north-eastern regions in particular are rich in songsters. Many birds, however, are gradually disappearing from their ancient habitats, among them the heron, black stork (the white stork can usually be seen in the vicinity of quiet country villages) and the raven, while the draining of much swampy land is gradually effacing its distinctive bird life, but wild geese and duck, cranes, grouse, woodcock, snipe, quail and small game generally are still common. The rivers, lakes and lagoons provide a large proportion of the fish food consumed by the population.

Wonderful Network of Waterways

The extensive hinterland of Germany and her growing dependence on foreign trade have compelled her to develop to the utmost every practicable method of transport. How important for commerce her rivers are is shown by the fact that the Rhine is navigable in Germany alone for a distance of 450 miles, the Elbe for 460 miles, the Weser for 280 miles, the Oder for 460 miles. On all these waterways are large and prosperous inland towns with fine harbours, equipped with the most efficient facilities for the rapid handling of merchandise. Such are Cologne, Duisburg and Ruhrort, Dusseldorf, Breslau on the Oder, and Berlin on the Spree, a tributary of the Elbe.

The value of the natural waterways for transport is greatly increased by an extensive system of canals. The largest undertaking of the kind is the

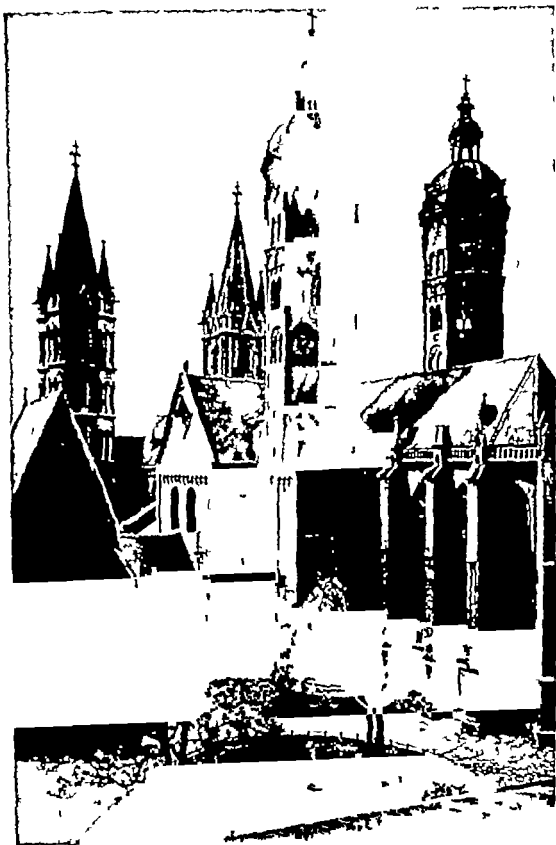
Kiel ("Kaiser Wilhelm") canal, which was built mainly with a view to naval considerations. By means of the network of tributary streams, canals and lakes, nearly all the large waterways of North Germany are now intercommunicable, forming a transport system unique in Europe. The aggregate length of the navigable rivers, canals and lakes of Germany is no less than 7,576 miles.

The country has an excellent railway system, which still comprises 34,000 miles of main and secondary lines, or just as much as before Alsace-Lorraine was lost to Germany. Practically the whole of the main lines and all but a small percentage of the secondary lines are owned or managed by the state. The road system of North Germany, though good, is probably inferior to that of France.

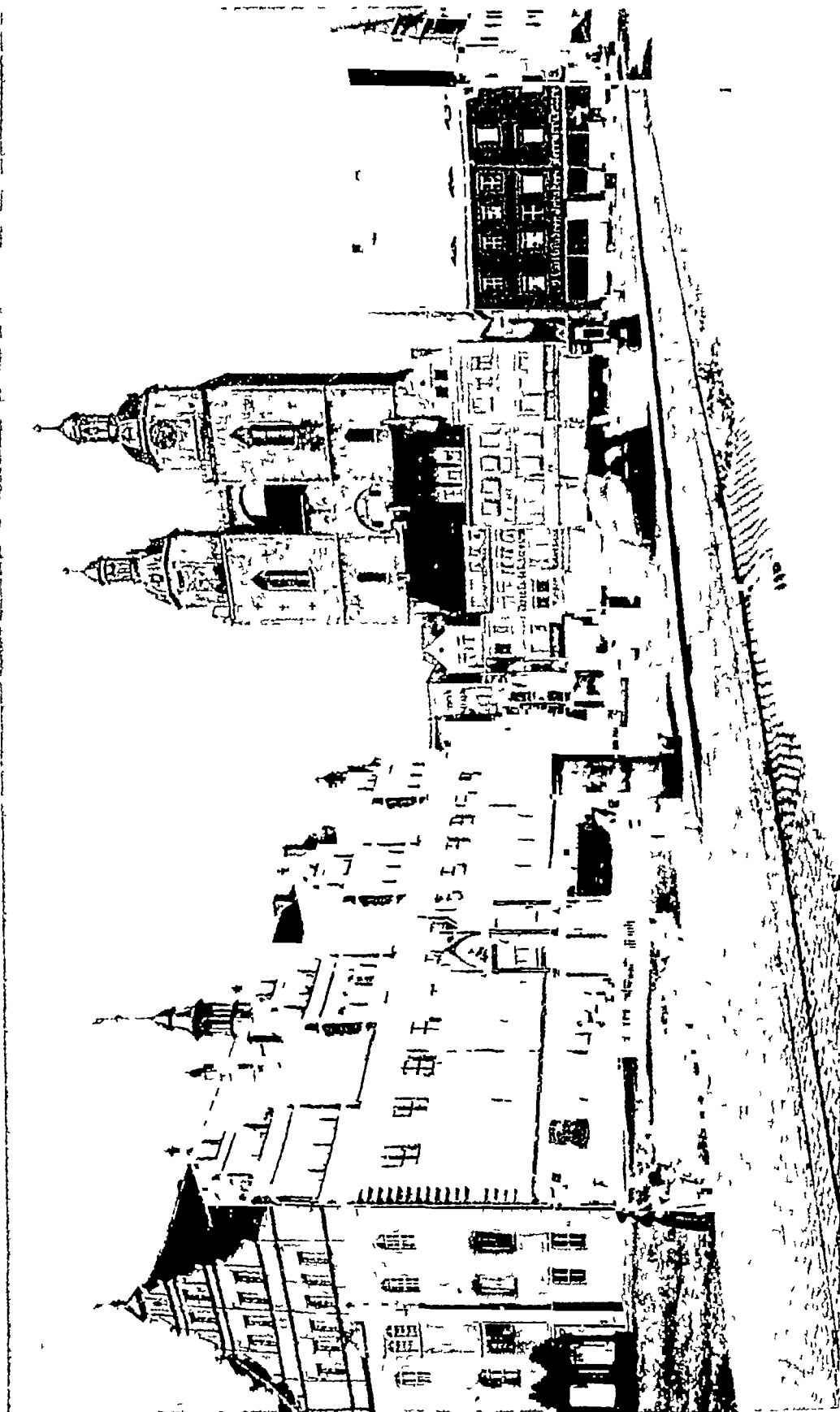
Efficiency on an Unkindly Soil

Nearly two-thirds of the surface of the country consists of cultivated land, meadow and pasture. The last comprehensive agricultural census showed that of the total area of Prussia 51 per cent was corn and garden land, comparing with 57 per cent in Saxony and 49 per cent in Mecklenburg, while the proportions under meadow and pasture were 15, 12 and 13 per cent respectively, and those under forest 24, 26 and 18 per cent respectively.

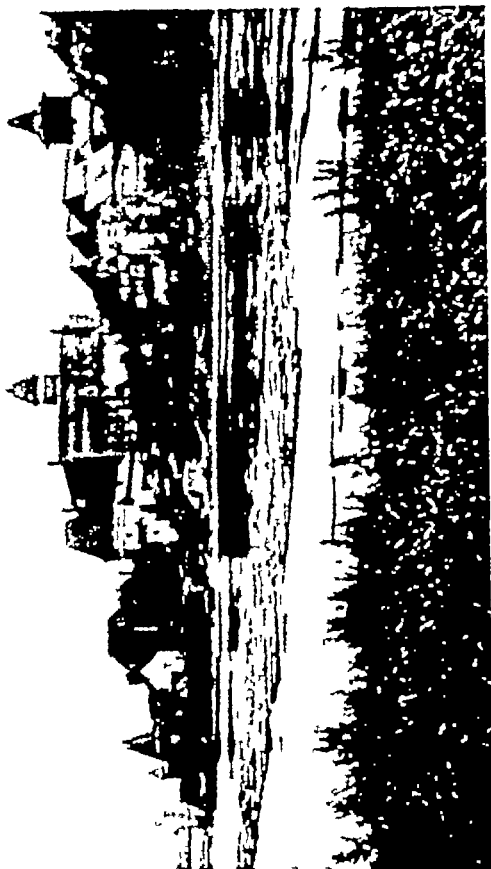
Except in a few districts, particularly in the west, the land is not specially fertile, and the north and east abound in expanses of sand, which yield on the whole a poor return. Agriculture is saved, however, by the existence of a numerous and efficient peasantry, working little farms on the intensive principles natural to the small man who knows that every hour he toils puts something into his own pocket. The principal cereal grown is rye, still the food staple of the greater part of the population. Although by the Treaty of Versailles Prussia lost a considerable area of corn land, about two-thirds of all the cereals produced in the realm are



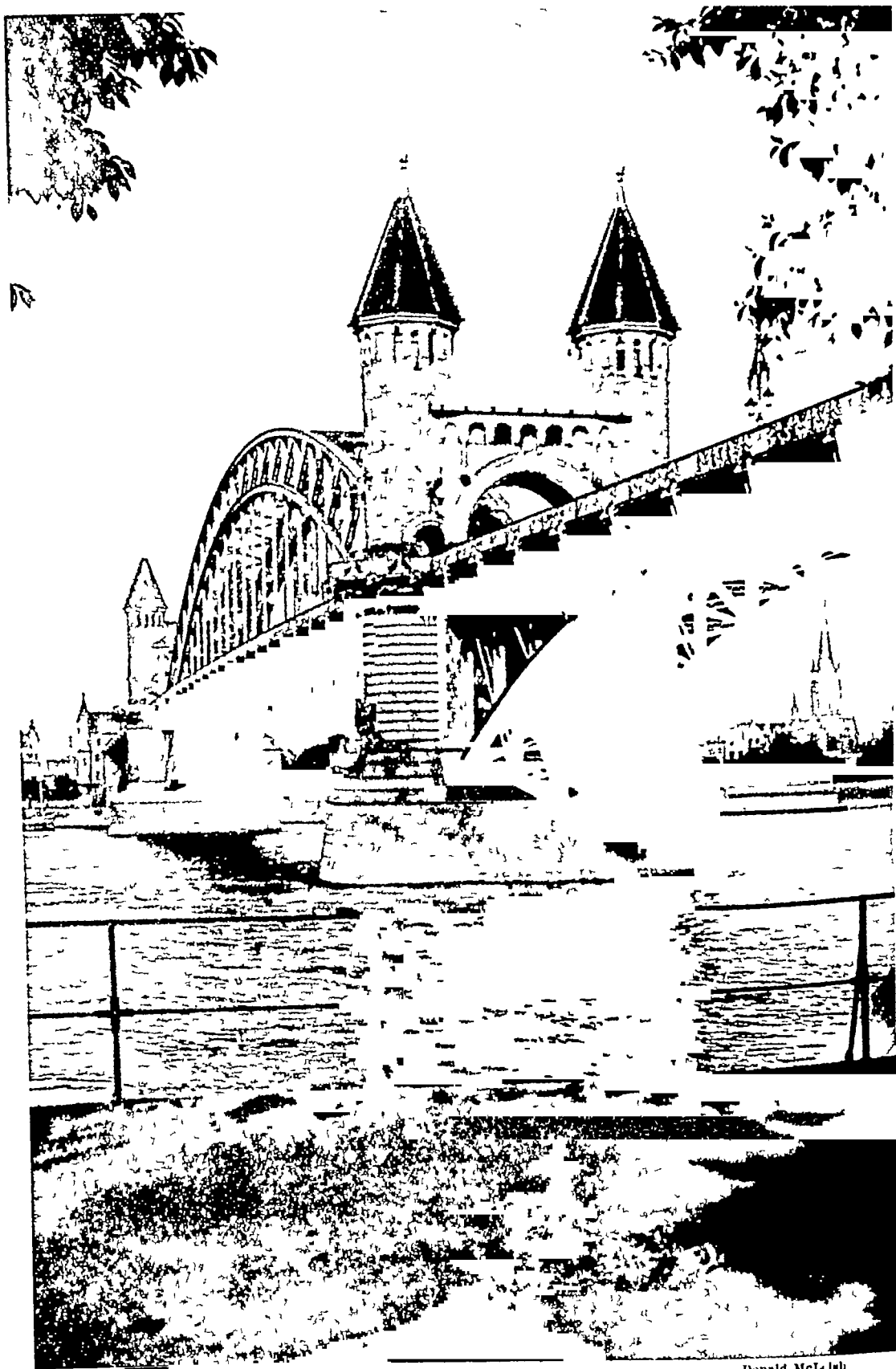
NORTH GERMANY *An interesting medieval feature of Naumburg in Prussia is the Romanesque-Gothic cathedral with four graceful towers*



NORTH GERMANY Before the old Rathaus in the market-place at Wittenberg canopied bronze statues commemorate the great reformers Luther and Melancthon In the Stadtkirche, seen on the right, Luther frequently preached

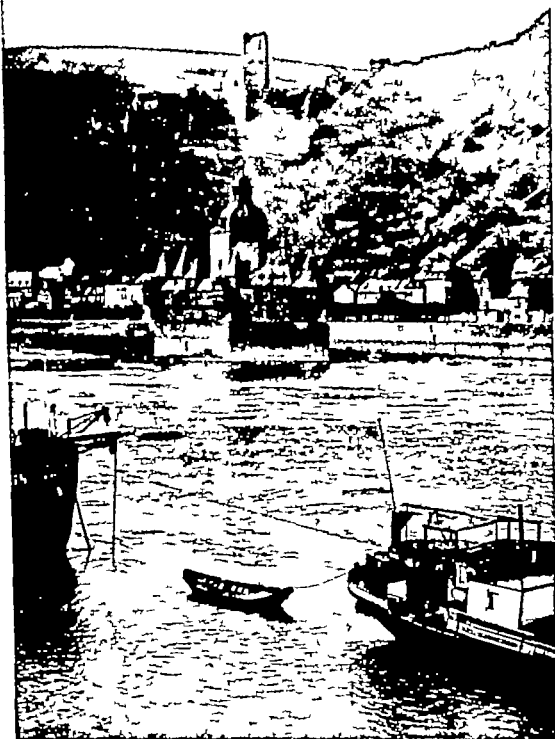


NORTH GERMANY In Wartburg an ancient town in the Saxon East Prussia is the castle, erstwhile residence of the Grand Master of the Teutonic Knights is one of the grandest, earliest medieval edifices in Germany

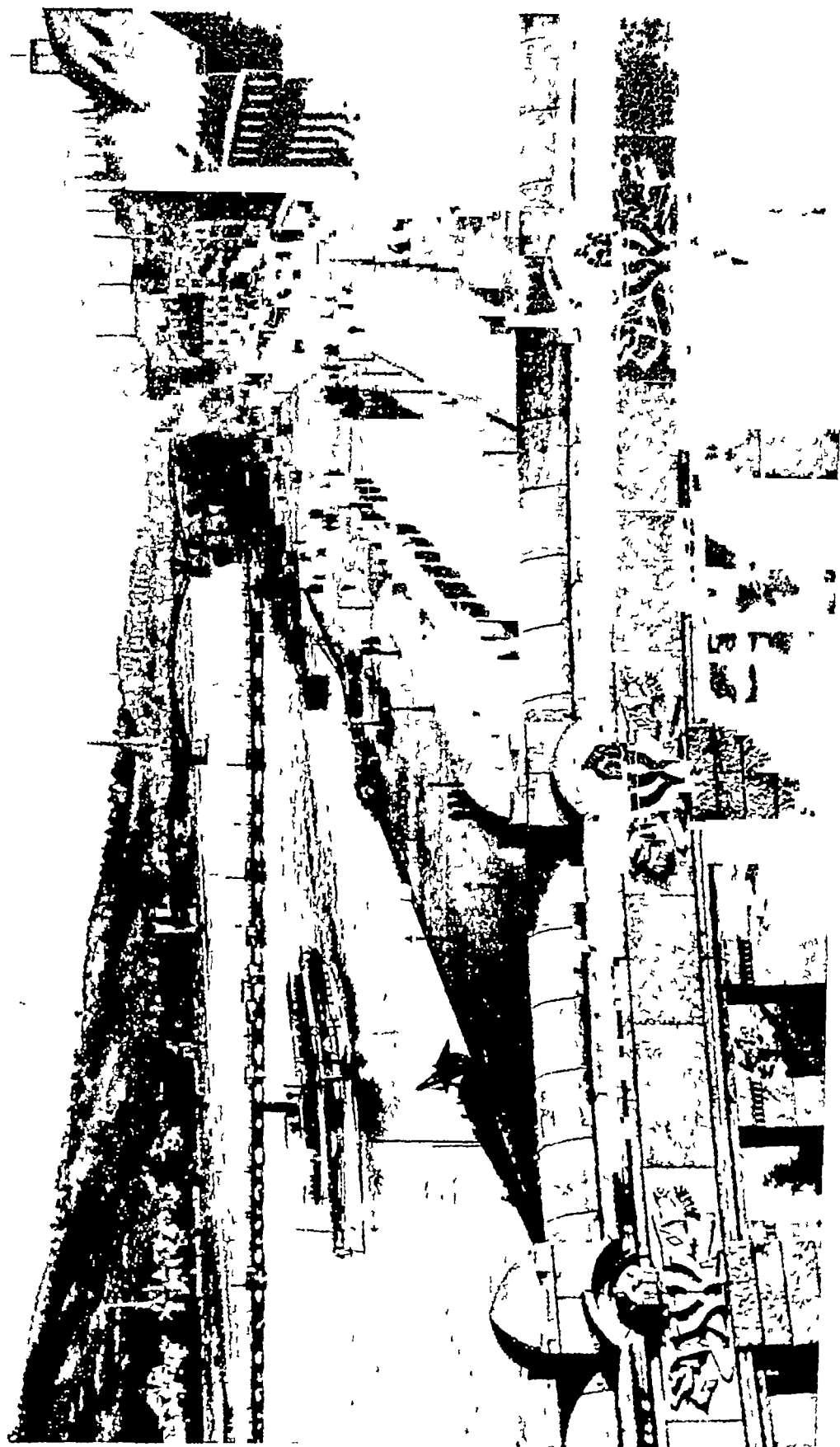


Donald McLish

SOUTH GERMANY *This imposing bridge spans the river Rhine and connects the residential town of Bonn with Beuel, an industrial district*



*SOUTH GERMANY Above Caub rises the ruin of Gutenfels before it
in mid Rhine stands the curious chateau of the Pfalz founded in 1314*

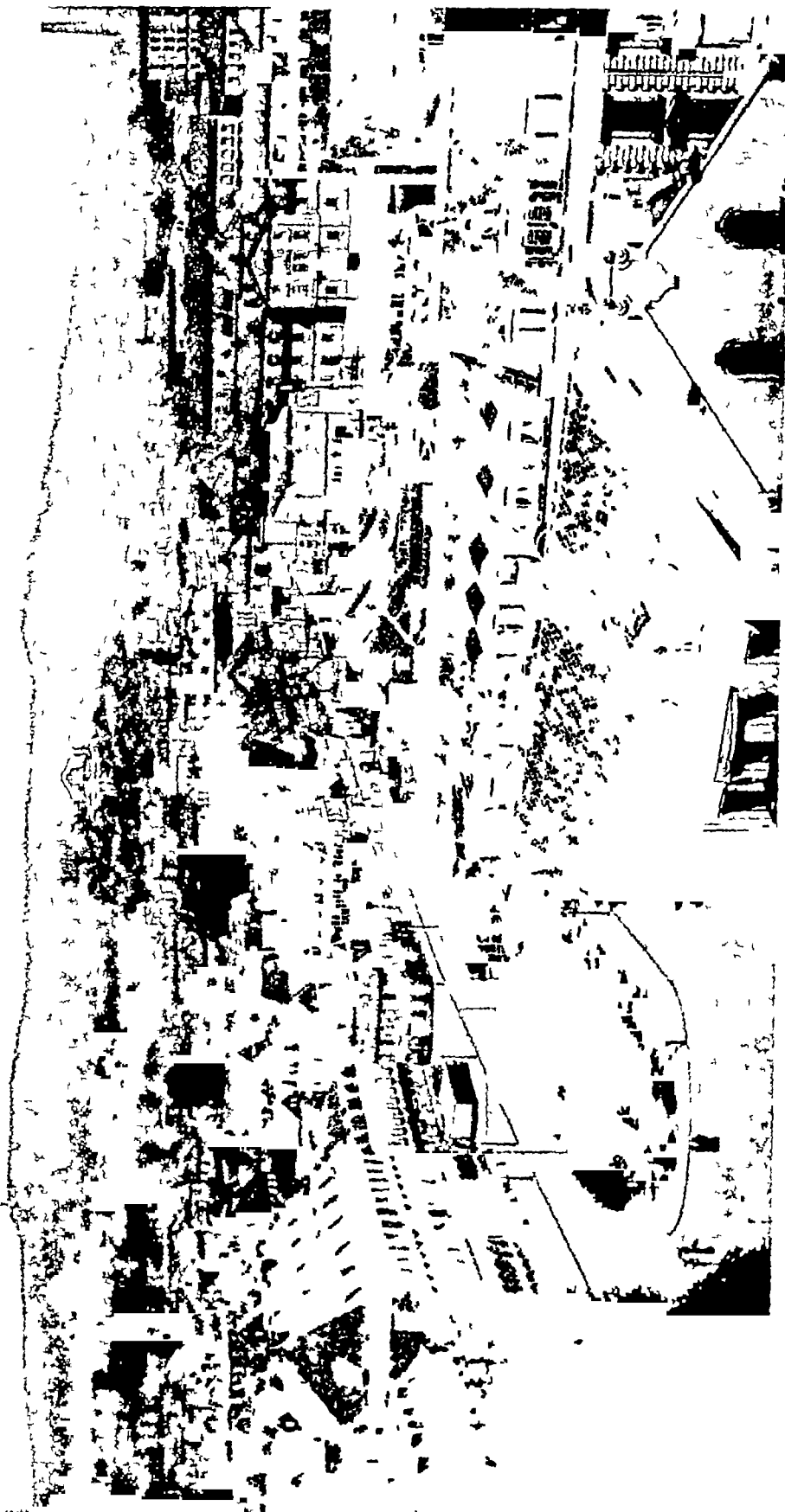


SOUTH GERMANY Few cities on the Rhine can vie in beauty of situation with Coblenz There is a fine view from the William I monument, commanding this fine sweep of the Rhine, its broad quay and notable bridge of boats

Donald McLish



SOUTH GERMANY The fortress of Ehrenbreitstein modernised in the nineteenth century overlooked the Rhine and the Moselle opposite Coblenz — a stronghold for centuries it played an important part in the Thirty Years War



BNA
SOUTH GERMANY. In the broad valley of Bavaria's Red Main is Bayreuth, famous for its association with Richard Wagner, the Festspielhaus, the chief Wagner memorial, being seen on the hill in the central background

German in the country with the exception of the north-west Saxony, Mecklenburg-Schwerin and the present East German part.

But, at present, the main concentration is in the German and the German people, the German people of the north and the German people of the south. The German people of the north and the German people of the south.

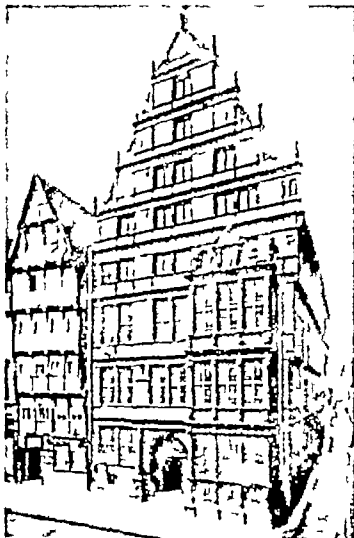
The German people of the north and the German people of the south. The German people of the north and the German people of the south. The German people of the north and the German people of the south.

The lower part of the country is a very fertile and fertile land. The lower part of the country is a very fertile and fertile land. The lower part of the country is a very fertile and fertile land. The lower part of the country is a very fertile and fertile land. The lower part of the country is a very fertile and fertile land.

All the fruits present to a temperate climate are grown with great success, sometimes in other and many of them everywhere in North Germany. The vine is, of course, more at home in the south than in the north, but it has been produced in Saxony and Lower Silesia, though of unequal quality. All might have been made, not without considerable enterprise on the part of the people concerned to grow wine as far to the east as I have known, formerly attributed to the East. The

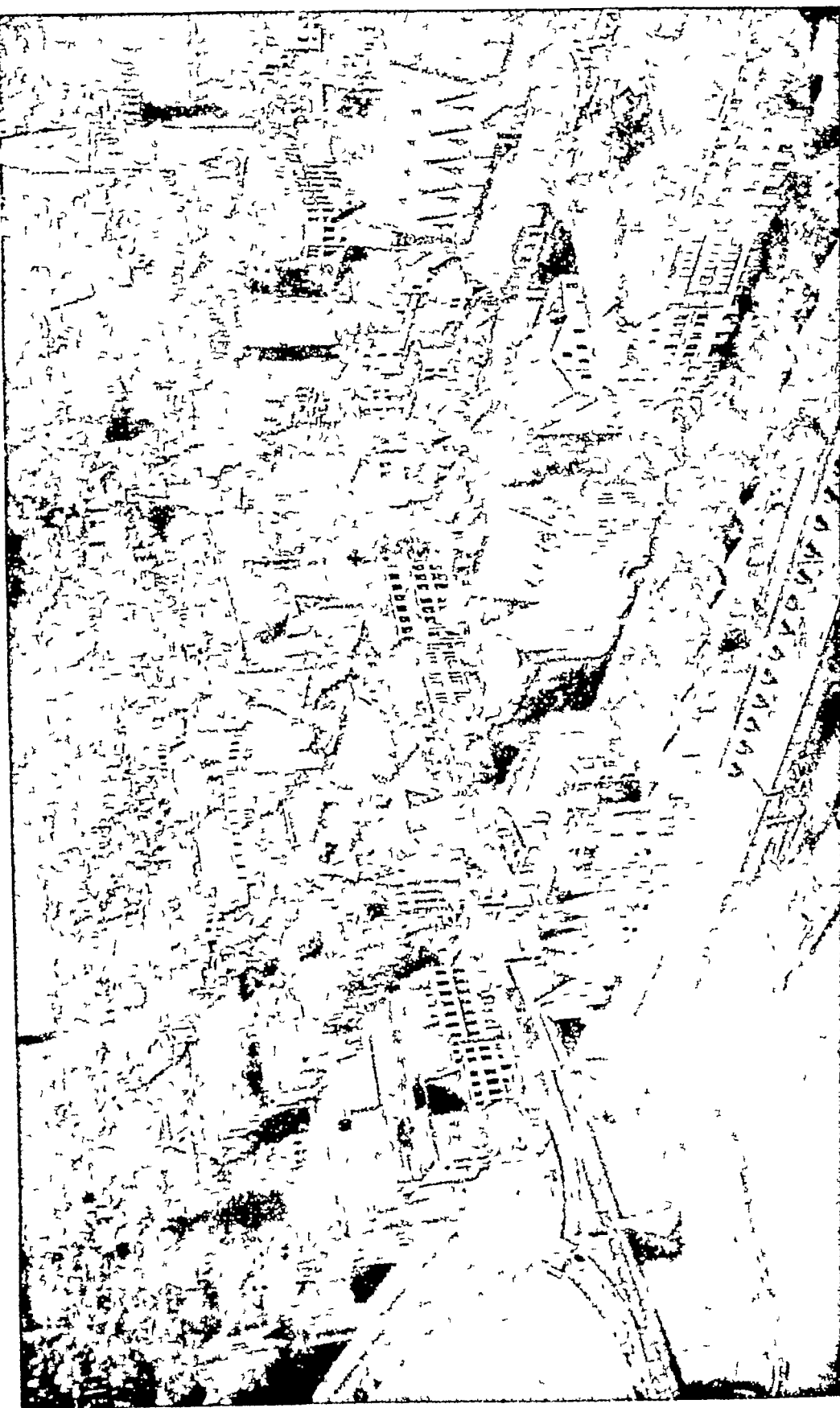
part of the country is the north of the country. The results were fully confirmed, for it was said that there are no approximations to the north of the country.

There is a fine view of the apples, pears, cherries, peaches, apricots and cherries, in the valley and many other parts of the country and the north of the country. The north of the country is a very fertile and fertile land. The north of the country is a very fertile and fertile land. The north of the country is a very fertile and fertile land.



FACADE OF LEIBNITZ'S HOUSE IN HANOVER

The photograph shows the facade of the house, which is a very fine example of the architecture of the 17th century. The house was built by Leibnitz, who was a very famous philosopher and mathematician. The house is now a museum, and it is open to the public. The house is a very fine example of the architecture of the 17th century.



Aerials

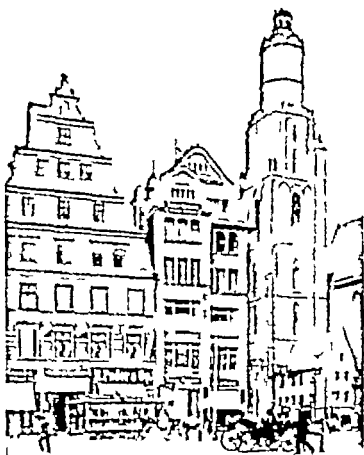
BREMEN WITH THE GREAT BRIDGE OVER THE WESER AND THE CUSTOM HOUSE IN THE FOREGROUND

At 40 miles from the mouth of the Weser is Bremen, chiefly known as a shipping centre. Its industries include ship building, the manufacture of ropes and cables, and the manufacture of paper, sugar and rice for the consumer. The substantial cable houses looking out upon the narrow winding streets of the city are characteristic of the city. The Romanesque cathedral is said to have been erected between 1011 and 1101, but was greatly altered in the thirteenth century, and the Rathaus, mainly Gothic, is remarkable for its richly decorated oriel window and handsome gable.

of rural North Germany are the fruit trees which often line the road from the little market town and villages far into the open country.

While this agricultural interest and employment has important place in the life of the people, North Germany is also the home of the great industries which have given to the country so much of its wealth. This pre-eminence is due to the extension of mineral wealth in great amount and variety. Much of this wealth has fallen into the hands of France and England as a result of the Great War. But Germany still holds in natural resources. Of these there are three in the Rhineland-Westphalia (the Ruhr) and the Chempagne-Lower Silesia and Upper Silesia. In the Ruhr and in the Chempagne quantities in a number of mineral states. The Ruhr is in is the main source of supply its production before the Great War being more than one-half of the entire German coal output of 250 million tons. It has greatly reduced while Silesia also in Prussia contributed another quarter. Over 600,000 miners were then engaged in the industry. In addition to coal there is an enormous output of lignite or brown coal (a cheaper and less efficient fuel) and peat found in beds varying from 3 to 40 feet is cut in large quantities.

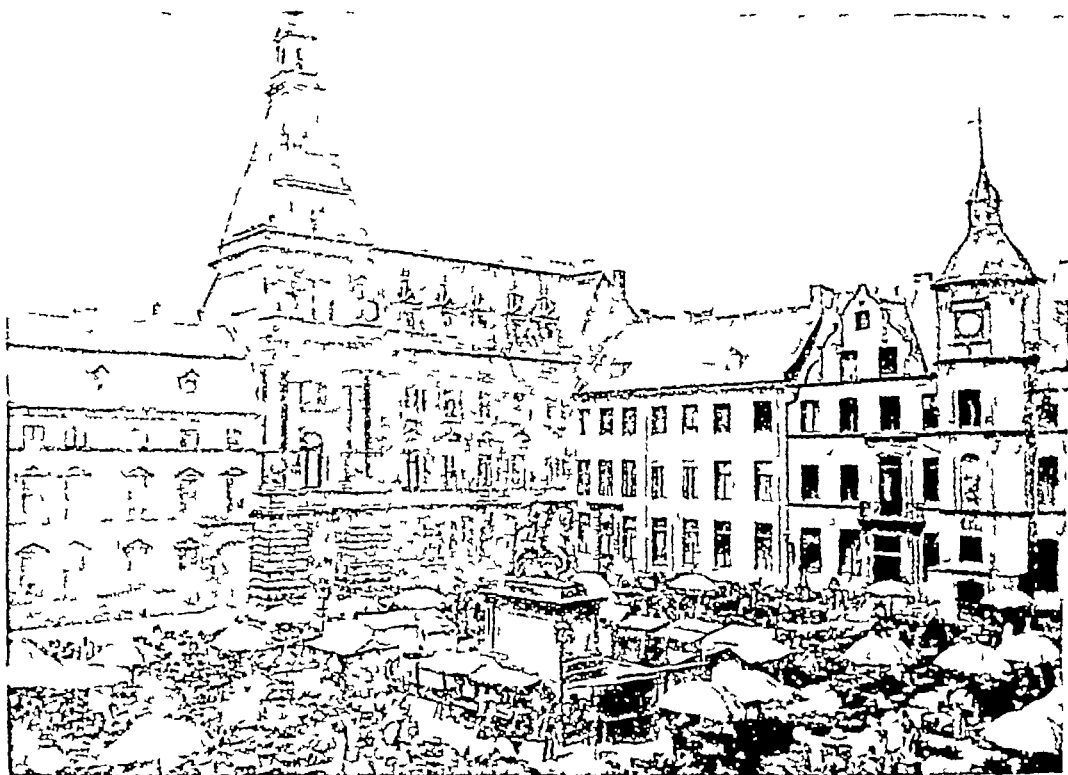
The principal iron ore mines are in Westphalia particularly the Ruhr district certain area of the Harz and Thuringia and in Upper Silesia. The rich and famous minette mines in Lorraine have of course passed into



8 ELIZABETH'S CHURCH IN OLD BRESLAU

1. 11. 1 part of Breslau on the left bank of the Elbe are many interesting medieval structures. One of the most notable is the Elizabeth Church (St. Elizabeth) founded about 1225 with a tower 50 feet high dating from 1456.

French possession. The rock salt and potash mines of North Germany are extremely rich and used to give employment to nearly 30,000 miners and other workers. The mining of precious metal once very profitable is now an industry of insignificant proportions though gold and silver are still found in small quantities in the Fichtel Gebirge the Ore Mountains and the Harz. Lead, copper, zinc and tin ores however are still largely mined, and other minerals found in remunerative quantities are wolfram, manganese, bismuth, cobalt, nickel and antimony.



Underwood

IN THE HEART OF OLD DUESSELDORF IN THE RHINE PROVINCE

The river port of Dusseldorf stands on the right bank of the Rhine at the influx of the Düsseldorf, 24 miles north west of Cologne by rail. It is an important centre of numerous industries, and almost daily the market place, flanked by the sixteenth century Rathaus, in front of which rises the bronze equestrian statue of Elector John William, teems with busy life vouching for local enterprise.

The Lower Rhine district, the Weser valleys, the Giant Mountains and the Sudetic range are rich in mineral springs possessed of powerful curative properties, and the towns which have developed this natural advantage have prospered in consequence. Among the best known "baths" are Ems, Wiesbaden, Homburg, Nauheim, Soden, Aix-la-Chapelle and Pyrmont.

Industry tends to follow its needed raw materials, or the cheapest trade routes by which these materials can be transported. In Germany as in Great Britain physical facts have located many of the staple industries upon which national prosperity has been built. Thus the principal seats of the iron and steel industry are all in North Germany, where the necessary ores and fuel are found, and particularly in the Rhineland, Westphalia, Upper Silesia and Saxony. In the first two of these are found the great blast furnaces and steel works which before the Great War

gave to Germany the second place in the world as a producer of pig-iron and steel and the same may be said of many of the dependent industries. Indeed, the hub of industrial Germany is an area some fifty miles long by six to sixteen miles wide, extending in a southeasterly direction from north of Essen to Siegen. There, in close proximity to the coal measures, industry is carried on in the intensest form, population is densest and life most strenuous.

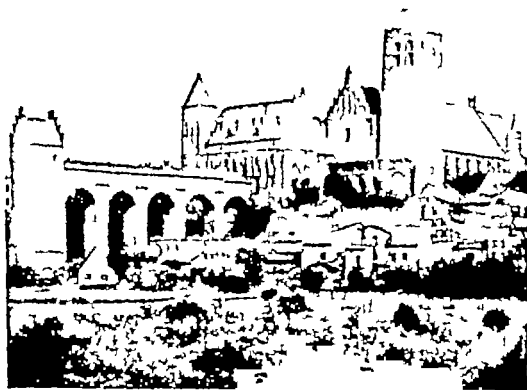
Most of the greater engineering works are located within or near that focal area, as at Essen, which in the past was also the principal centre for heavy armaments (as Berlin and Solingen were for small arms), Dusseldorf, Dortmund, Cologne, Duisburg, Hanover and Magdeburg, though they are also found as far afield as Breslau. The machine and cutlery industries are similarly identified with special localities. Thus textile machinery is largely produced at Chemnitz, in Saxony, agricultural

malberry at Meßburg Hall and Frankfurt, some parchment at Dresden, cutlery and hardware at Solingen and Remscheid, while the principal and the only natural centre at the foot of the North-South line is Bremen. In north-west and the Baltic coast, Kiel, Lübeck.

That the German people are much on the move is shown by the fact that almost everywhere there is a strong stream of immigration from the East. The population of the eastern provinces is still decreasing, and the German people are being pushed from the East to the West. In the North and Upper Saxony and Saxony, where the German people are still in the majority, and in the

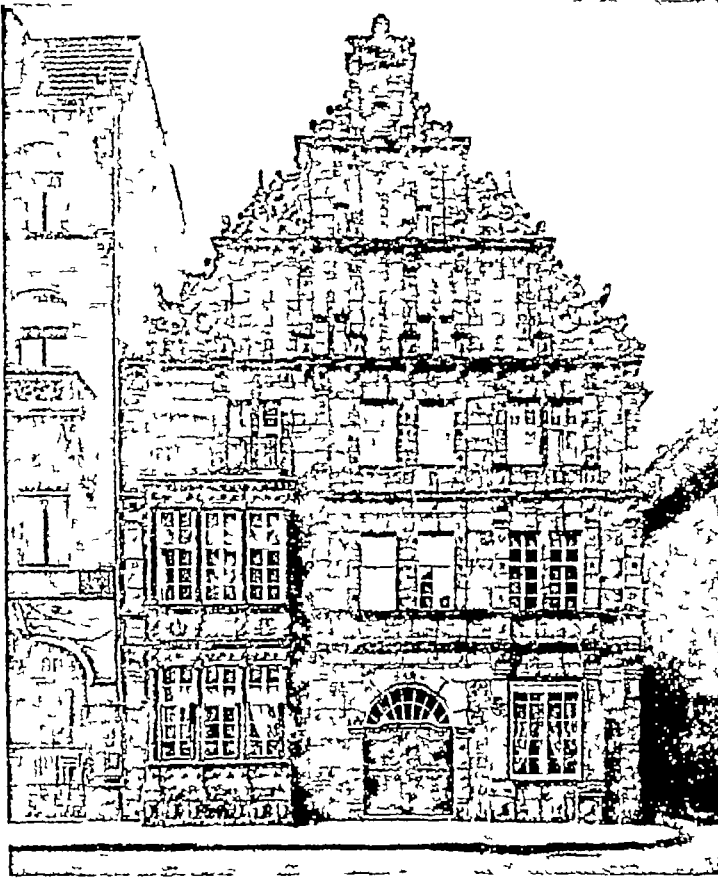
Westphalia, Silesia and Saxony, and in a number of Rhineland towns.

North Germany being divided between agriculture and industry, the utmost variety of economic conditions and social life exists. Between the agrarian east and the industrial west, in particular the contrast is very marked. Broadly speaking, the west stands for the dynamic force which impel men to a new and a different and new path, way, for progress, while the east stands for the static force of conservatism, experienced in the tendency to always crawl down to lay things as they are. The timber war was drawn by the way, even what you may see at any time in the day and night mark towns of East Prussia or Mecklenburg are still in a race, an a and a



MARIENWERDER CATHEDRAL AND CASTLE SEEN FROM THE SOUTH WEST

Aqua is the German town of the Prussia with 15,000 inhabit. The Marienwerder (and) on the Baltic and the Marienwerder, 25 miles north by rail, is a lovely, associated with the powerful knights of the Teutonic Order, who founded Marienwerder in 1293. The by side and dominating the town is the old stone houses, said the called at and castles; the former dates from the fourteenth century.



RATCATCHER'S HOUSE AT HAMELN E N A

In Hameln, an ancient town lying 25 miles south west of Hanover, is this Renaissance edifice of 1602, called the Rattenfängerhaus, the reputed home of the legendary ratcatcher known to English readers through Browning's poem, "The Pied Piper of Hameln"

civilization whose pace not even war and revolution have seemed to hasten

Like the people, the towns of North Germany present many contrasts though there is one creditable aspect in which all are alike, and that is the fine proportions and often stateliness of their public buildings. Many of the old town halls are unique in their way, often revealing a dignity of form and wealth of carving worthy of the finest ecclesiastical monuments of medieval times. But the modern public buildings of any German town, even of moderate size, are almost invariably planned and built for their special purposes, and in their erection no expense is spared in the endeavour to make them worthy examples of their kind, and so to encourage in private individuals the cultivation of good taste and public-spirited enterprise in the same direction. Even the railway stations are

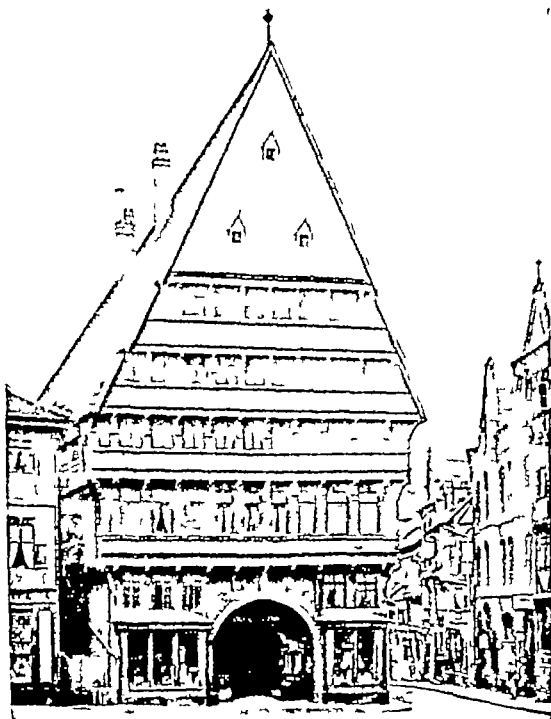
always well and solidly built, lavishly spacious, and not seldom decorated with quiet dignity where decoration is fitting, as in their elaborate façades.

Coming to contrasts, however, the great differentiation is that which age has created. In the east and north-east of the country there are delightfully picturesque and archaic towns like Königsberg, Stralsund, Greifswald, Marienburg, and formerly Danzig, while the modern world is represented by towns like Berlin and Leipzig.

So, too, the west and centre have in Munster, Brunswick, Goslar, Fulda, Hildesheim and a host of other towns, small and large, superb memorials of a distant past, side by side with modern towns like Dusseldorf, Mülheim, Essen, Bochum and Dortmund, all impressive

in their way, pulsing with life and energy, but lacking the subtle charm of "atmosphere" and historical finish. In effect these modern cities might be described as rather cosmopolitan or continental than German in appearance, one is pretty much like the other, and all have their counterparts in the larger and better-built towns of almost any country of North Europe. Many of the old towns have renewed their youth, so that within the municipal jurisdiction an "Old Town" and a "New Town" exist side by side.

Several of the larger North German towns are separately described elsewhere in these pages, but there are others whose historical associations, archaeological interest or commercial importance, or all together, give them a special claim to notice. Such a town is Hanover, capital of the old kingdom

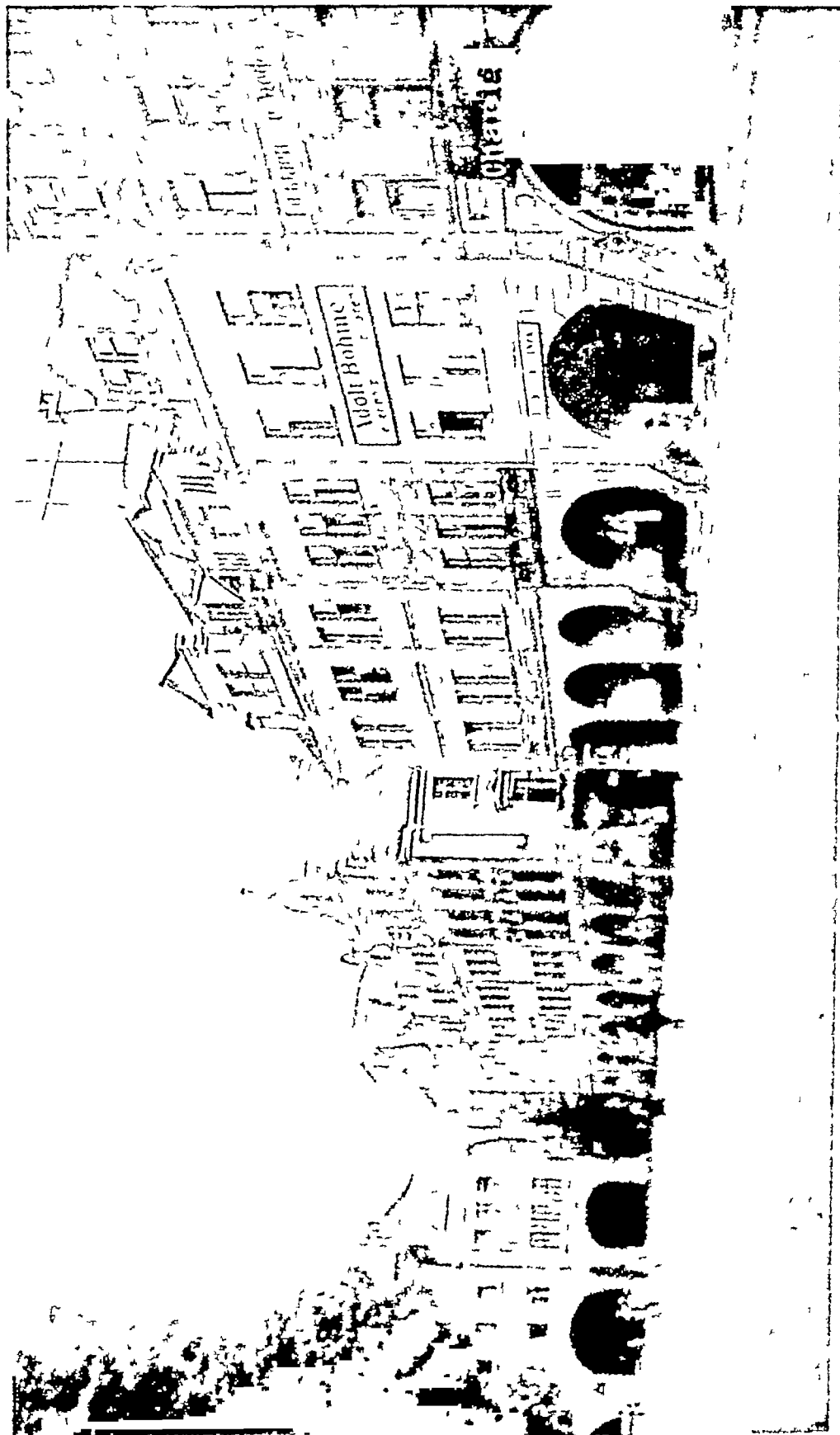


GEM OF ARCHITECTURAL BEAUTY IN OLD HILDESHEIM

At every early period Hildesheim enjoyed prestige as a cradle of art and still possesses beautiful specimens of medieval and German Renaissance architecture. The Knochenhauer Amtshaus, the restored guild house of the butchers, built in 1529, ranks among the finest timber buildings in Germany. A lofty roof crowns the many-towered structure and the façade is richly adorned with carving.



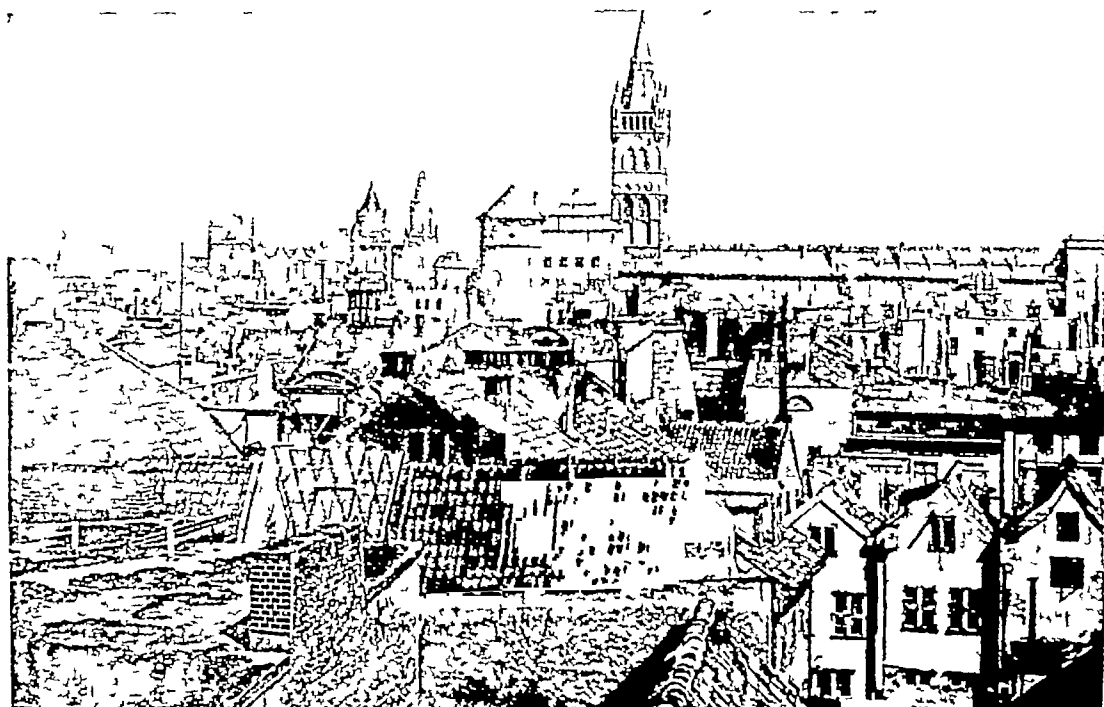
WERNIGERODE IN THE HARZ MOUNTAINS, WITH THE DISTANT CASTLE OF STOLBERG-WERNIGERODE
 The Harz, the northernmost mountain chain in Germany, is a finely wooded range some 56 miles in length and 20 in width, comprising the Upper and Lower Harz many sections of which are associated with legendary occurrences and much frequented by tourists and invalids. Attractively situated on the slopes of the range, 13 miles south west of Naumburg, is Wernigerode, a charming town with many quaint old dwellings and delightful walks. The castle and park of the Prince of Stolberg-Wernigerode occupies a proud position on one of the neighbouring heights and commands a fine panorama of the surrounding country.



QUAINT ARCADED MARKET PLACE IN THE OLD TOWN OF HIRSCHBERG

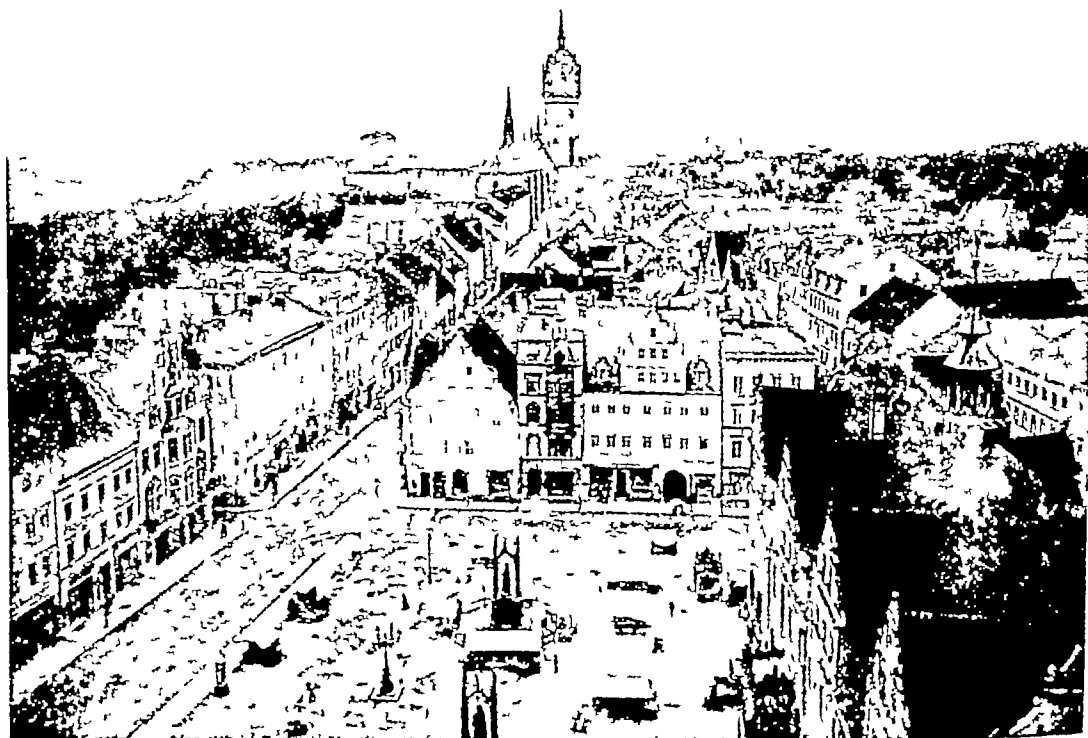
The town is an important centre for the manufacture of artificial flowers, and the surrounding area is a major centre for the manufacture of artificial flowers.





LOOKING OVER THE ROOFS OF KOENIGSBERG TOWARDS THE CASTLE

Königsberg stands on the Pregel about four miles and a half from its mouth on the Frisches Haff, and separated from Prussia by the Free State of Danzig and the Polish corridor. An important Baltic port and manufacturing centre, its output includes machinery, chemicals, toys and sugar. The chief buildings are the castle or palace, with a lofty Gothic tower, begun in the thirteenth century.



MARKET PLACE, WITTENBERG, AN INDUSTRIAL TOWN OF PRUSSIA

Wittenberg was one of the cradles of the Reformation and is justly proud of its associations with the great reformers Luther and Melancthon, who were members of its famous university and whose bronze statues, under Gothic canopies, are seen above in the market place. The lofty 289 foot tower in the background belongs to the Schlosskirche (castle church), erected in the fifteenth century.

(cont.) Haackel



DELIGHTFUL ENTRANCE TO THE WARTBURG NEAR EISENACH

Built about 1100 on peaks in Thuringia, the Wartburg is one of the finest medieval secular buildings in existence. Martin Luther was brought here by the Elector Frederick III and remained ten months in voluntary imprisonment. A room, but little altered, in the castle contains the great reformer's table, foot stool, books, seal letters, portrait and other memorials.

commercial importance with Hamburg (which is separately described elsewhere) they are like it in having retained political independence and a republican status through many centuries, so that the revolution of 1918 meant far less to them than to the rest of Germany. Bremen, in particular, is rich in archaeological interest, its wonderful town-hall, built at the beginning of the fifteenth century with the exception of the superb façade, being a veritable poem in stone. Lübeck lives largely on the past, it is a quaint place, full of monuments of old, and has preserved its individuality in a marked degree.

Leipzig, the fourth town of North Germany in population, may be regarded as in some sort a second capital of Saxony. It is also a particularly progressive and enterprising town, strongly imbued with the modern spirit, and architecturally is one of the handsomest in the whole country. Its national importance rests on the fact of its being the seat of the Supreme Court of Judicature, of a popular university, and of the book publishing trade. The inner quarters of the town are a tangle of narrow, crooked streets, but the modern portions have been planned and executed on bold and enlightened lines.

Brunswick makes a strong appeal to the archaeologist as a typical piece of old Germany. Happily, like Nuremberg, it has kept in check the hand of the moderniser, with the result that old and new blend without undue violence to the historical features of the town. There are whole streets of picturesque half-timbered, high-gabled houses, the oak of their quaint façades richly carved. The town-hall of the old town is an exquisite example of fourteenth century Gothic architecture, and the Clothworkers' Hall (Gewandhaus) and the building used by the Chamber of Handicrafts are also artistic memorials of distant centuries.

The more interesting towns of Thuringia include Weimar, which is full of associations of Goethe and Schiller, Eisenach, situated on the edge of the beautiful Thuringian Forest, and overlooked by the Wartburg, where Luther enjoyed refuge against his enemies, Erfurt, where the seeds come from, and Jena, with its university and famous Zeiss scientific glass factory.

Altogether it is safe to say that no part of the Continent offers more points of interest to the traveller, whether bent on pleasure or study, than are to be found in the towns and rural districts of North Germany.

GERMANY NORTH GEOGRAPHICAL SUMMARY

Natural Division. The western section of the Great European Plain (Cf Poland, the middle section, and Russia, the eastern section) Bounded by the dune coast of the North Sea, the glaciated lakeland coast of the Baltic Sea, the block mountains of Central Europe—Harz, Ore Mountains, etc. On the south, the German plain (largely Prussian) leads east and west to Russia and Belgium. Across the plain the lower portions of the Elbe and Oder meander, misfits in valleys which they did not carve.

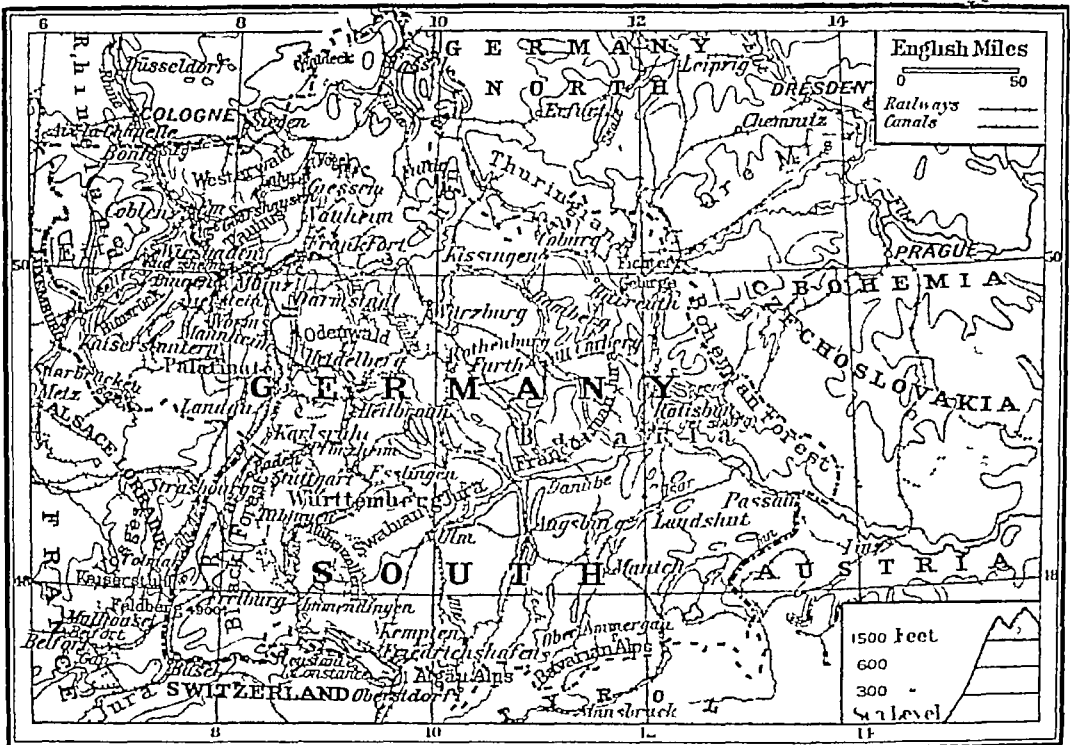
Climate and Vegetation. The western end of the plain is West European in type, with relatively mild winters, the eastern end is continental, with cold winters, frozen rivers and harbours. The natural vegetation is forest, most of which has, however, been cleared.

Products. Coal and iron along the edge of the block mountains. Sugar-beets, potatoes and rye on the plain. Salt

potash and, consequently, chemicals. Textiles and metal goods on the coal-fields. Ships along the coast.

Communications. Antwerp—Berlin—Warsaw—Moscow, Hamburg—Berlin—Vienna—Constantinople are the two typical route lines along the plain to east and west, across the plain to the sea. The Elbe and Oder lead to Hamburg and Stettin to sea traffic. The canals from the Rhine east to the Vistula supplement the railway routes and connect the rivers.

Outlook. Great industrial developments in relation to the coal-fields have overshadowed the agricultural progress of the plain, which, in some respects, rivals that of Denmark and Northern Belgium. The future alone will show whether this geographical unit will cohere, and by its cohesion overcome the separatist influence of the distance from Cologne to Königsberg and with its cohesion dominate the Germanic element in Europe.



THE HIGHLANDS OF SOUTHERN GERMANY

the extreme south-west. In the latter quarter it has forced a passage through the Jura belt, which curves up from France north-eastward, narrowing and with steeper proclivities, as it touches the other mountain range of the Black Forest in the Basel country. Then, again, the valley of the Rhine on the western side of the South German block, now fairly well drained, was ever of a swampy nature, interposing a flat willow-grown tract of alluvium between the river-bed and the foothills of the Vosges Mountains. On the German side—the east bank of the Rhine—the Black Forest stands up as a scarp, throwing out an advanced post of later volcanic action, the Kaiserstuhl, an eminence which may figure as the apex of a triangle of which the base is the line Colmar-Mulhouse.

The eastern boundary of South Germany is very obviously a geographical one, running from the Fichtel Gebirge along the gentle ridge of the Bohemian Forest, the latter a range of such antiquity that erosion and denudation have blurred its contours, softening its former sharp outline against the sky.

The three sub-divisions of South Germany have many features in common which distinguish them as a block from northern Germany, the differences between the three being the consequence of local conditions. As to climate, the difference between South and North Germany is distinctly marked. It may seem strange at first that the average temperature of South Germany should be appreciably lower by a matter of four to six degrees than that of the northern part of the Empire. This fact is due to the higher elevation of the block, the northern scarp of which rises to some 1,200 feet above sea-level from the northern plains. The block then rises towards the Alps until its mean height is little less than that of Europe's highest plateau, central Spain.

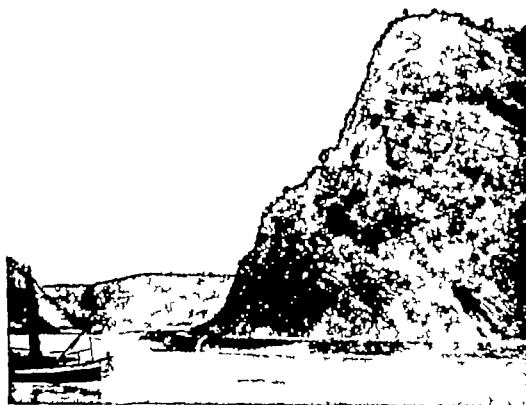
The gentle winds from the west and south-west take a half share of all the winds that blow over South Germany. They bring moisture with them. Much of this is held up by the way, but a sufficient share is left to the South German block. In addition to this, the snow-clad Alps send down their contribution. The southern German block

therefore reckon on an irregular rain fall all the year round, heaviest in July when the sun is most intensely on the snowfield. Owing to the concentration of the flock the rainfall is unevenly distributed: the sheltered valleys have to be content with 3 inches, on the wind swept plateau it rises to 6 inches. This factor reacts locally on the temperature and some of the valleys of South Germany may be counted among the warmest sunniest spots upon the northern hemisphere.

The wild animal of this region are of the tribes common to all western Europe north of the Alpine range. A certain number of aboriginal wild life have disappeared, entirely through the agency of man who would not allow his earnest efforts at tilling the soil to be galled by herds of aurochs, nor did he appreciate the effort of the wild pig. There remain, however, red deer and the fox

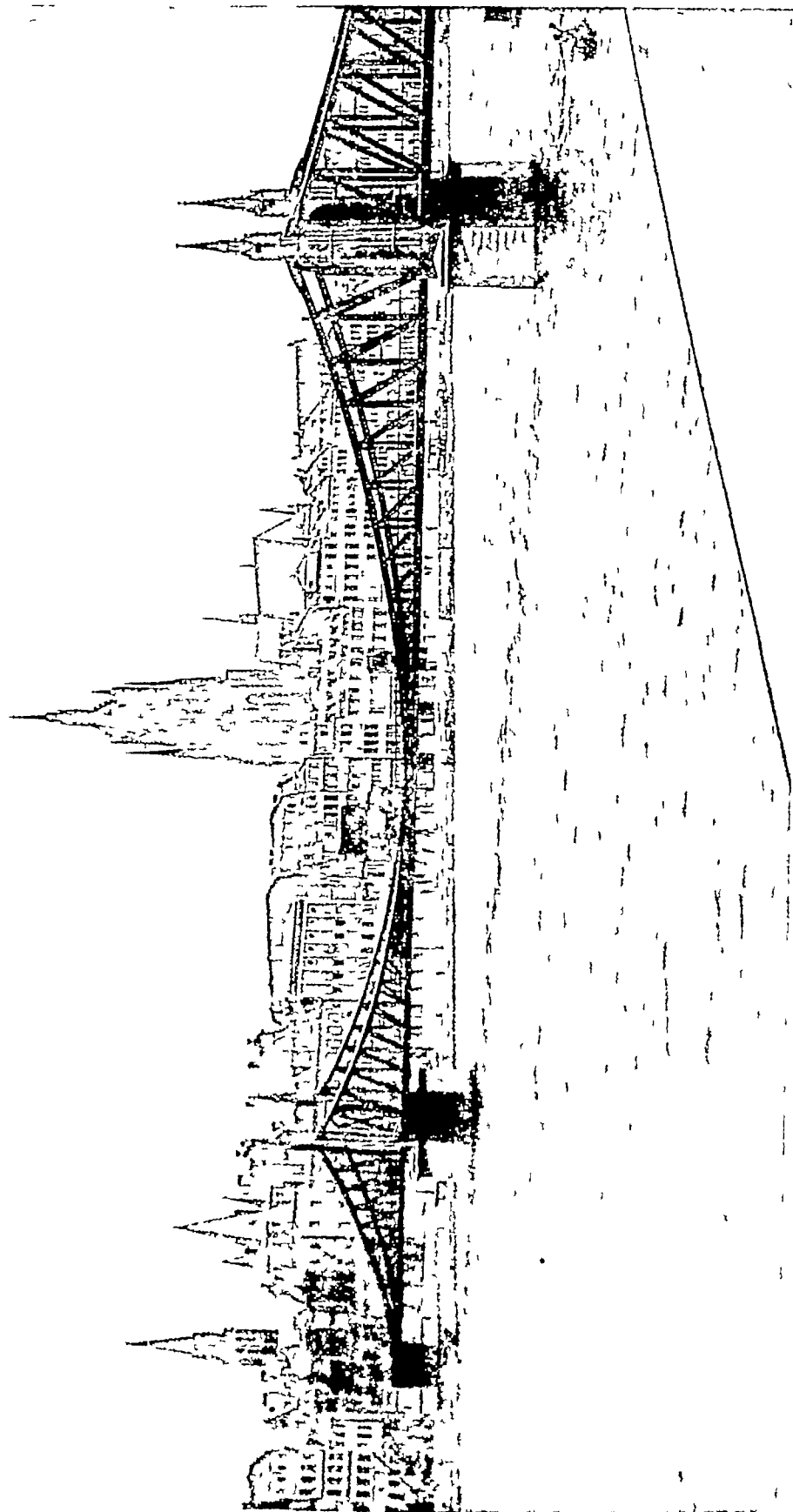
(to be shot at sight) badger and the lesser rodent, not forgetting a funny little animal called the dormouse by the Germans, which is said to be very clever at making up for its lack of provision for the winter. In every winter wolves have been known to come down from the Vogt Mountains and cross the frozen Rhine into Baden in search of their food.

Game birds, blackcock, woodcock and pheasant are found in the forest. Partedies are sometimes found flying low over the marsh fields, or plentiful in the wild lake. There is a farable land and my many found in the marshes by the banks of the Danube. Of innumerable small waterfowl there are all the varieties that people British waters and the low they are joined in the season by migrant which visit Britain like wise and the rest of many stages by the Danube, how the untidy



BEND OF THE RHINE AT THE IMPOSING LORELEI ROCK

This famous rock, immortalised in many songs and fairy tales, is the last of the series on the right bank of the Rhine, near the Goarhausen. Here one of the remarkable echoes they return and their position in the narrowest and deepest part of the river, the cliff was said to be haunted by spirits who foretold destruction to the boatsmen in the rapid at the precipice foot.

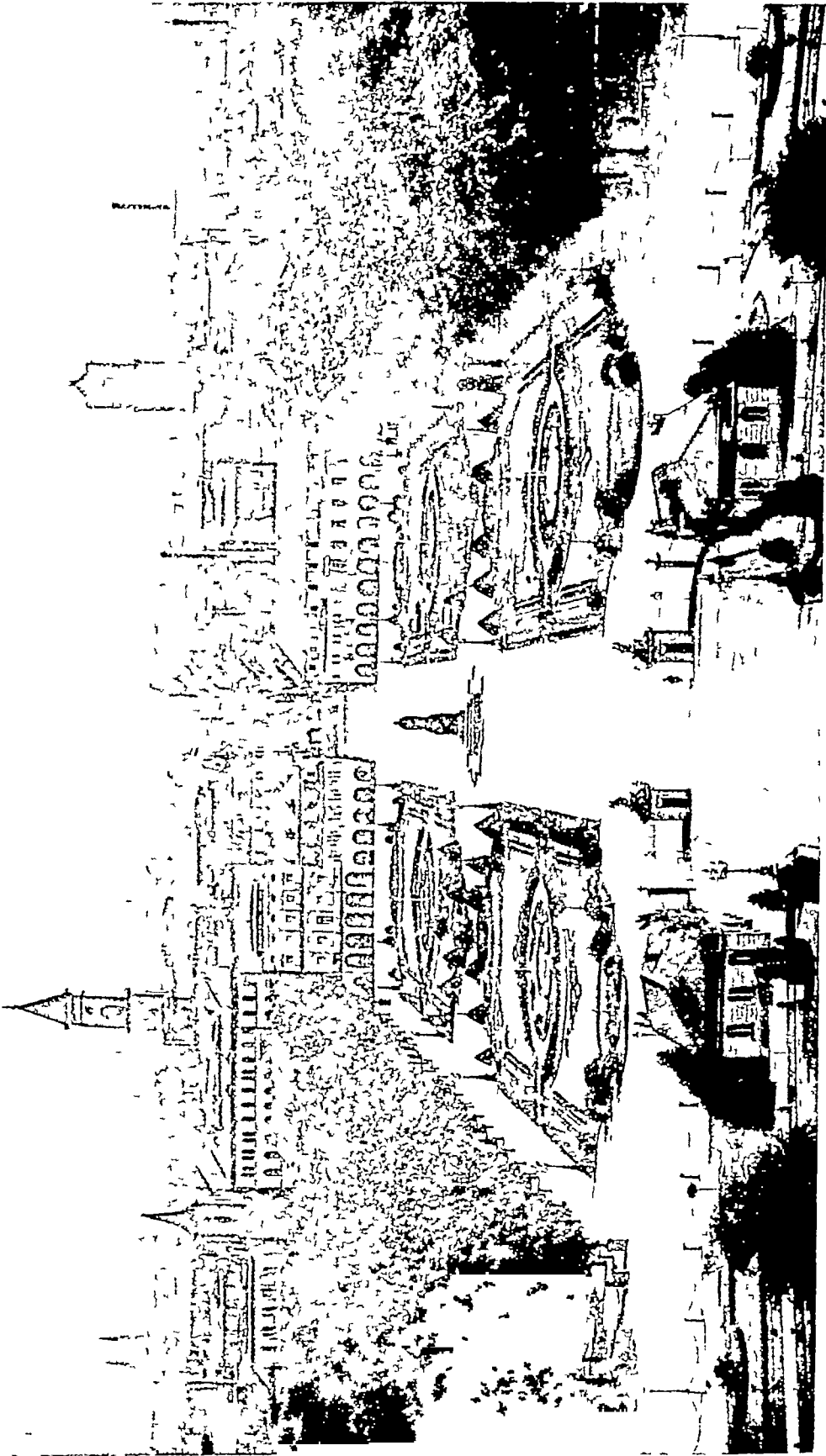


BRIDGE-SPANNED STREAM OF THE MAIN FLOWING PAST THE PINNACLED WEST TOWER OF FRANKFORT CATHEDRAL
 Frankfurt lies on the right bank of the Main 24 miles from its junction with the Rhine, and for many centuries has been considered one of the most important
 German central towns in Germany. It is served by a network of railway lines and the river greatly adds to its facilities for transport. There are numerous public buildings
 with varied historical associations while as a banking centre and the home of some of the earliest printing Frankfurt has long been noted, its fairs celebrated from the
 Middle Ages are still of importance. The lofty tower, 310 feet high in the central background is that of the fourteenth century cathedral of S Bartholomew
 Ewing Galloway



PANORAMIC VIEW OF OLD HEIDELBERG IN ITS BEAUTIFUL SETTING IN THE NECKAR VALLEY

The beauty of the environs and its historical interest has placed Heidelberg to the forefront rank of interesting German towns. Situated on the south bank of the Neckar in Baden, miles from its junction with the Rhine the old town is sanely set between the hills and the river. The view really far from beautiful proportioned structure (the cradle of science in South Germany was founded in 1386, but its outstanding attraction of Heidelberg is undoubtedly the loss of a castle of the thirteenth century which stands on a wooded hill high above the town, with picturesque water fall and tower broken and laid



KARLSRUHE, CAPITAL OF BADEN, OVERLOOKING THE PALACE SQUARE AND A PORTION OF THE OLD TOWN

The chief building at Karlsruhe is the palace, erected in the latter half of the eighteenth century in the form of a semicircle, and affording a magnificent and an extensive view of the town and its environs. In front of the palace is a handsome square, adorned with gardens and fountains, with a bronze statue of the Grand Duke Frederick from it in a southerly direction runs the Karl Friedrichstrasse, the central street of numerous thoroughfares which radiate in fan fashion from the palace. The town's industrial development dates from 1871, the principal manufactures including engines, furniture and plated ware

necks of the tork. A elsewhere in our hemisphere parrot and crow are permanent vociferous lodgers.

The extensive wood and forest are under careful supervision and produce a volume of timber which float down the rivers as rafts to be dealt with at such port as Mannheim on the Rhine and Ratibon on the Danube. The rivers are full of the various species of fish found in British home waters—the migrant salmon and the lesser permanent kind, bream, perch and others. Occasionally a royal sturgeon makes its way to the upper waters of the Rhine and Danube, trout flourish in the mountain streams, which also harbour crayfish and in the ponds the pike keep fat carp from becoming unduly flabby.

Rick Crops from Stabborn Soil

But of all the primary occupations farming undoubtedly takes the foremost place in South Germany.

South Germany's chief strength lies in its arable districts. The nature of the surface soil is very varied and on the whole demands a good deal of effort before it yields its fruit. But this constant need for effort has bred a race of men competent and determined to overcome difficulties. There are certain more favoured districts in the valley of the Upper Rhine, the Lower Main, the Bamberg basin and the Swabian uplands which are best dealt with under their respective sub-divisions.

On the whole all the cereals and crops characteristic of the hemisphere thrive well in South Germany. About 5 per cent of the whole area is under wheat and its peculiarly German variant, spelt. Barley for malting is in great demand, less so rye. Maize is grown as fodder as also are trefoil and lupin. Hop-growing is another profitable branch of agriculture, and sufficiently extensive to satisfy the considerable demands of the largest beer consuming population in the world while leaving a good margin for export. Potatoes and vegetables are grown in quantities sufficient only for local needs,

but one source of pride is the fruit growing industry. While in the sheltered valleys more delicate fruits, apricot and peach, even the edible chestnut are ripening, the harder trees, apple, pear and cherry in their heavy laden rows along highways and byways bear testimony to effective cooperation between man and nature. The cherry tree is a particular favourite in these parts, not only for its fruit but on account of a spirit distilled therefrom and famous under the name of kirsch.

Green Vineyard by the Rivers

Finally, on the south and westerly slopes of the trias formations covered by volcanic soil and slate that absorbs the heat and radiates it by night, rise tier above tier the terraced vineyards of the Rhine, of Neckar and Main and their tributaries. From this wealth of sun-baked slate and tender green of vines, grim ruins of feudal strongholds rise here and there peering with sightless eyes over the broad winding rivers while clouds sail high over their roofless hall and sunshine invades their dungeons.

For its size South Germany cuts but a modest figure in the mining industry, and such mining as there is converges on the richer districts of northern Germany where the foothills drop down to the plains. On this fringe are the copper mines and lead deposits on the Lahn and Sieg rivers, the lead-bearing stratum again appearing in the Eifel Range on the north bank of the Moselle. As compensation for this lack of mineral wealth South Germany has the salt mines of the Neckar valley and the health-giving mineral waters of spas such as Baden-Baden.

Interdependent Industries

A natural outcome of the primary occupation of salt-mining is the secondary one of chemical manufacture. Some of Germany's most important aniline dye works are situated on the Main and in Bavaria. And again, as an accompaniment to the dyeworks, there are the extensive cotton mills of



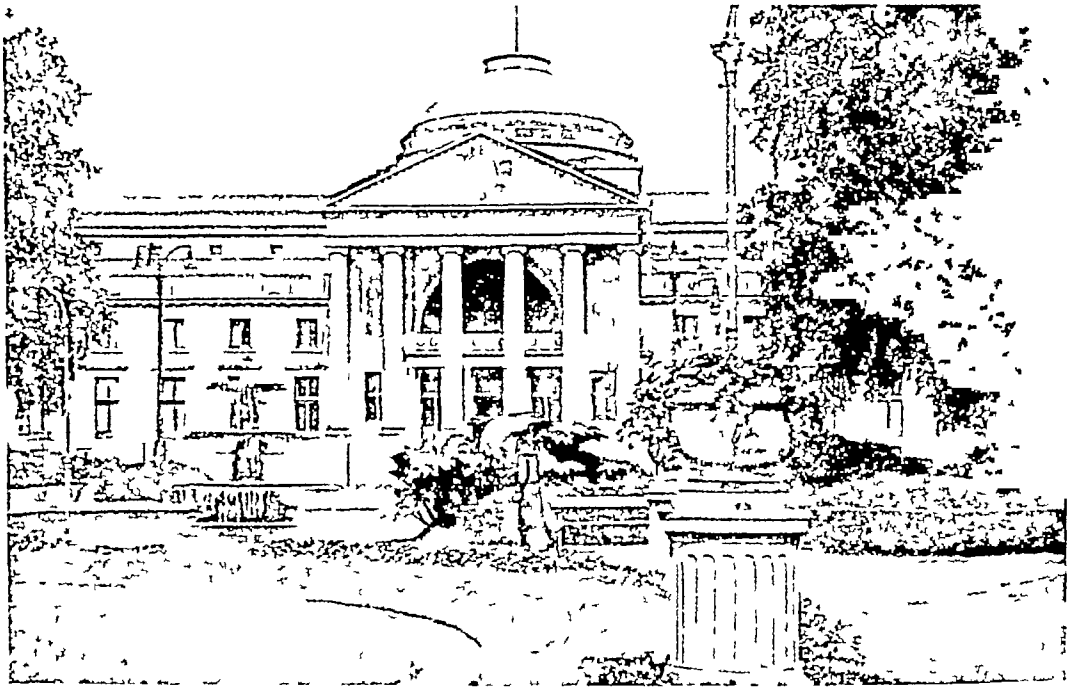
AERIAL SURVEY, FROM THE SOUTH, OF BADEN, POPULAR WATERING-PLACE IN THE VALLEY OF THE OOSBACH
To distinguish it from the watering place of the same name near Vienna and from the spa in Switzerland, Baden, the town and pleasure resort of Germany, in Baden, is usually called Baden Baden. An ancient town, the efficacy of its waters was known to the Romans, but its modern popularity as a sanatorium dates from the beginning of the nineteenth century, and until 1872, when public gambling was suppressed it was noted for its gambling establishments. As a favourite health centre it is rivalled in Germany by Wiesbaden only, and enjoying a mild and salubrious climate is a place of annual resort for thousands of people



BEAUTIFUL POINT OF VIEW OVER BADENWEILER AND ITS ENVIRONS ON THE OUTSKIRTS OF THE BLACK FOREST
 A few wooded districts of Germany present such picturesque landscapes as the Black Forest. It is not in Baden and Württemberg alone, but in Germany. The forest, which figures as a home of legends and romance, contains a number of mountains, lakes and rivers, while fertile, open, are found. Badenweiler lies in the western part of the Black Forest, 150 feet from the Rhine. It is a magnificent surroundings, especially in the and famous for a survey of the valley of the Rhine. It is a magnificent surroundings, especially in the and famous for a survey of the valley of the Rhine.

Wurttemberg a considerable factor in Germany's textile production. In this instance the absence of coal, mined locally, is being compensated for by an increasing use of water power. There is yet another characteristic industry of South Germany, a by-product of its extensive forestry, toy-making. Nuremberg toys are known all over the world for the quality of their workmanship.

o the Danube and Ratisbon, and wanders up the valley of the Regen across the Bohemian Forest and onward over many difficulties to the Baltic Sea. Then again the Rhine offers a roadway northward to the German plains, sending out an important connecting link with the Danube, along the Neckar's bank, past Karlsruhe and over the Swabian hills.



Donald McLeish

GARDENS AND FACADE OF THE NEW KURHAUS AT WIESBADEN

Ranking as Germany's principal watering place, Wiesbaden is likewise celebrated for its lovely surroundings. It occupies the site of a Roman settlement and lies on the south west spurs of the Taunus mountains, three miles from the Rhine. The spa has some thirty springs, the waters of which are found to be beneficial for a great variety of ailments.

their ingenuity, but above all for their tender fancifulness recalling fairy tales.

Nature intended Germany to be a corridor between East and West. All roads to eastward radiate from Paris, in Southern Germany they break into a variety of branches, to take the northern line to the east. From the Belfort Gap the roads begin to bifurcate. The Rhine valley, where it all but joins the Danube, leads eastward under the shadow of the Alps to the gateway of Passau. Before reaching this defile it crosses another ancient highway much in use when all roads led to Rome. This highway comes up over the Brenner Pass, swings down via Munich

Another ancient highway leaves the Rhine at Mainz and leads up the valley of the Main into Bohemia, detaching branches to the Lahn at Giessen, to Hanover and Leipzig via Fulda between the Vogel and Rhon Mountains. Still another road leads round the north-western bastion of the South German block, a continuation of the connexion Paris-Metz down to the valley of the Moselle and the Rhine.

Punctuating these lines of communication are a number of ancient distributing centres. Nuremberg, Munich, Augsburg, Ratisbon, Karlsruhe, Mainz, Frankfurt and many lesser ones. These names have a more German a more familiar

sound to us than many equally or even better known North German names, such as Berlin, Leipzig, Dresden names which are, in fact, of Slavonic origin. Of all these towns Nuremberg is perhaps the best known to those who are interested in German life and conditions. Ancient highways of trade from Italy over the Brenner Pass, from the Rhine eastward, meet at Nuremberg, and thence strike out again to northward for the timber of the Harz Mountains, to eastward into the Bohemian Forest, and on toward the Moldau, Elbe and the Oder to the Baltic. The course of these roads was directed by the river Main from the Rhine to the Regnitz, which flows past Nuremberg and has within the memory of man been connected with the Danube at Kehlheim by means of the Ludwig Canal.

Munich and Old Nuremberg

Munich, Munchen, also owes its origin to the facilities given by nature, though in a lesser degree—to a primeval line of communication, the Isar, which in its upper reaches connects up with the Inn at Innsbruck, and thus lies on the Brenner Pass route.

Nuremberg and Munich offer marked differences from each other, due to situation and consequent development. Whereas Nuremberg lies in a wide and fertile valley with natural exits that offer no great obstacles, Munich has to contend with a system of turbulent mountain-streams released from several hill-locked lakes. To-day it is a large city—you may gauge its size from the railway line as it sweeps down from the north-west in a bold semicircle. It is a city that preserves carefully its ancient buildings and orders new constructions in the same spirit as that which informed the indomitable age which created it, a ring of factories surrounding Nuremberg tells of its industrial importance.

Frankfort's Debt to the North

Munich is of later date than Nuremberg, and was ever of less importance as a centre for commerce and industry,

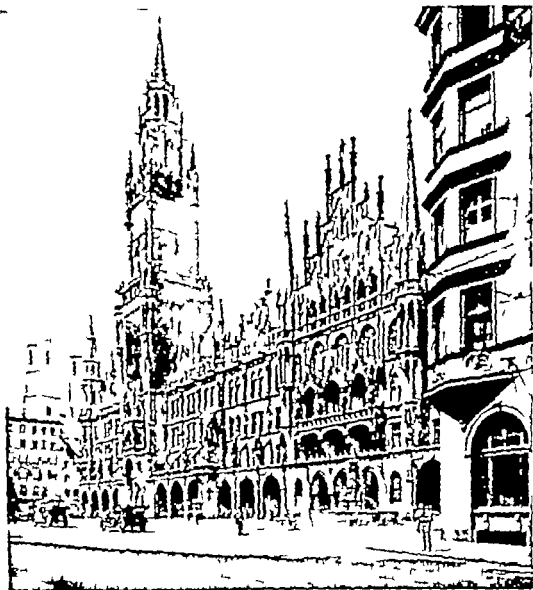
its area of distribution is more limited, its natural approaches more difficult. It is probably due to the beauty of the lake scenery in its neighbourhood, to the glorious air that comes down from forest-clad mountains, that Munich was chosen as Bavaria's capital. The taste of a line of cultured rulers and of an art-loving people have made of München a city beautiful.

Among the other South German towns mentioned in the group above, Frankfort is probably best known to English people after Nuremberg and Munich. Frankfort started with a great natural advantage, as its name implies, for it was here that the Franks are said to have found the first ford across the river Main, some miles from its confluence with the Rhine. Despite the fact that Frankfort, by means of the rivers Nidda and Kinzig, opened out the way to northern Germany across the Taunus and Spessart heights, this city held no very prominent position in the life of Germany until comparatively recent times, until, in fact, the growing weight of northern Germany made itself felt in the South.

Metamorphosis of Country Towns

With the definite shifting of commercial and industrial values caused by the annexation to a new German Empire of Alsace and Lorraine, Frankfort's importance increased by leaps and bounds, and soon the banks of the Main became a network of railways and canals, joining up this city with Mayence (Mainz), its natural outlet on the Rhine, the highway to the sea.

The industrial and commercial development of the river area Rhine-Main-Neckar is responsible for the change of Karlsruhe and Stuttgart from pleasant, quiet little residential communities into business centres of importance. Karlsruhe, as the name implies, originally the peaceful retreat of an Archduke Charles in the early nineteenth century, connects the Rhine with the Danube, via Stuttgart and Ulm, over the Swabian Alps. Stuttgart



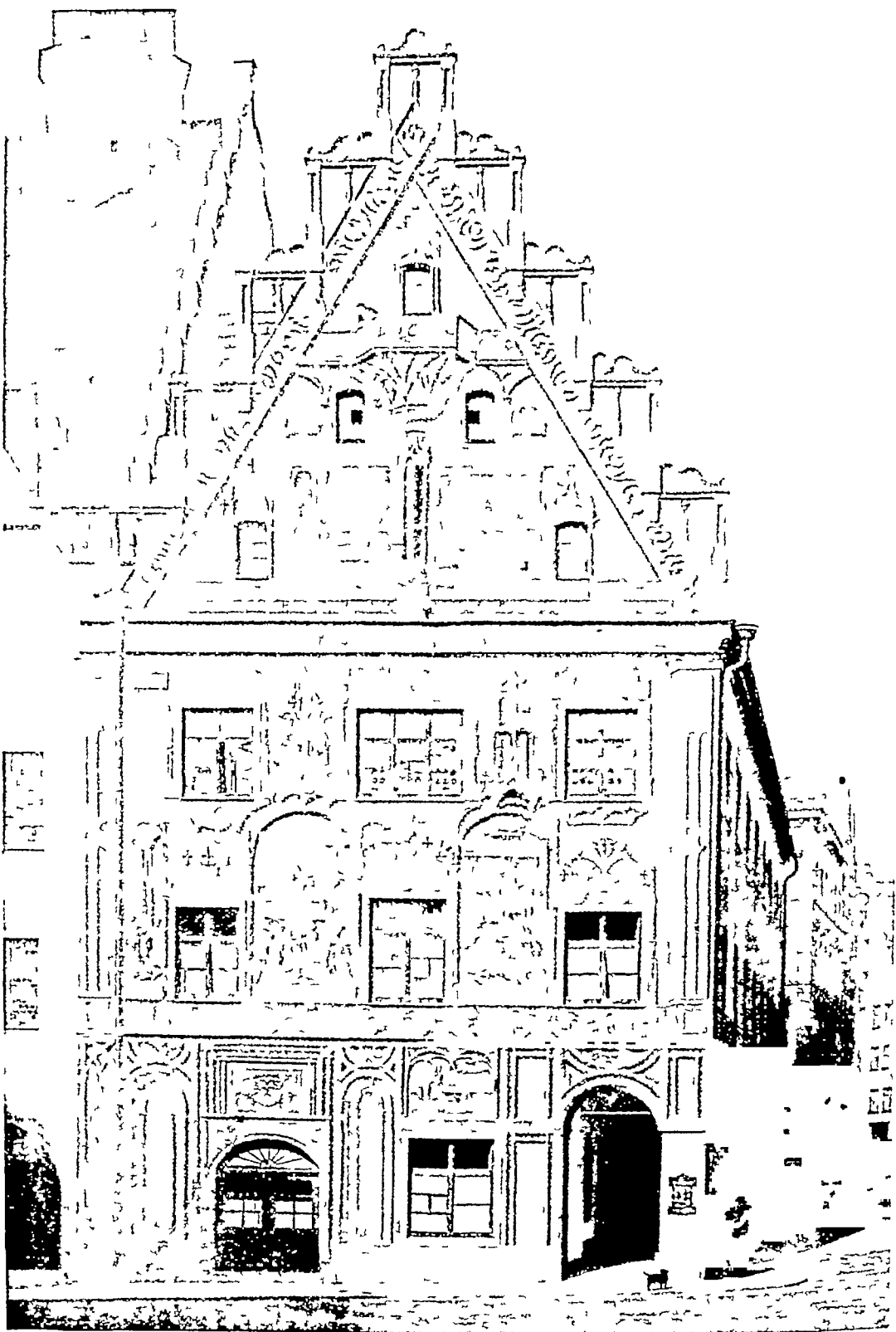
RICHLY ADORNED GOTHIC RATHAUS OF MODERN MUNICH

Munich, the chief city of Bavaria, is considered one of the best built cities in Europe. It is essentially a modern city though the gates of the now ambled walls of the old town are still standing. A distinctive feature of the city is the new town hall, rising on the north side of the Marienplatz, handsome pile erected in 1874-1905 and lavishly embellished with sculptures.

again an ancient home of lords margraves dukes and kings of Württemberg, has enhanced its position as centre of the charming and fruitful Neckar Valley by the skill and enterprise which made of this picturesque waterway a live artery in the South German system.

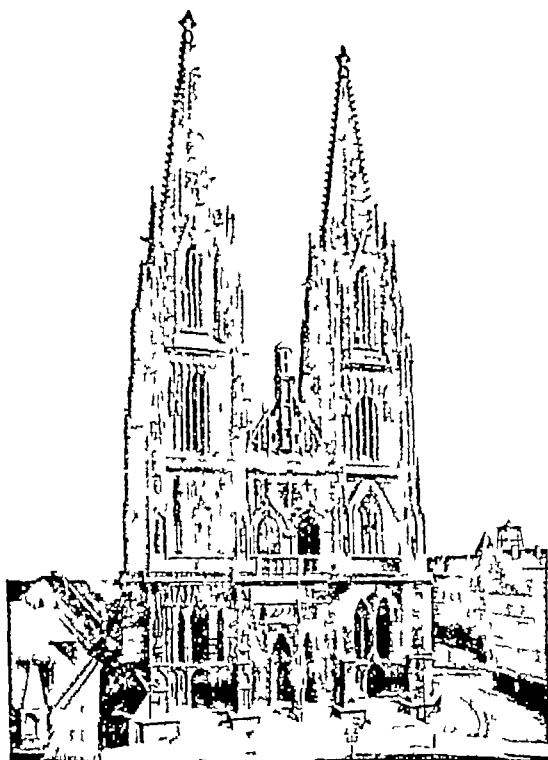
The section of South Germany comprised within the system of the upper Danube is roughly triangular in shape. The southern side is taken up by the Swabian and Bavarian plateau at the

foot of the Alps the northern border is composed of Black Forest Swabian and Franconian Jura. These ranges seem to swirl outwards from south west to east from the granite block of the Feldberg 4900 feet the highest point of the Black Forest. The base of the triangle is formed by the Bohemian Forest its apex is in the Basel bend of the Rhine which at this point turns in a northerly direction to mark the boundary of South Germany as far as the heights of the Rhine Palatinate



OLD TOWN-HALL OF ULM WITH ITS FAMOUS FRESCOED FACADE

Among the principal secular buildings in Ulm, an old fortified town of Wurttemberg, lying on the left bank of the Danube opposite New Ulm in Bavaria on the right bank, the town hall occupies a prominent place. Erected at the beginning of the sixteenth century, its style depicts the transition from Late Gothic to Renaissance, and its façade is adorned with old frescoes, retouched in 1905



WEST FRONT OF THE FINE OLD CATHEDRAL AT RATISBON

Ratisbon stands at the junction of the Danube and the Regen, 85 miles north east of Munich. Its cathedral is considered the chief Gothic edifice in Bavaria. Largely a thirteenth century structure but with chapels of still earlier date. It is a magnificently interesting building and contains many fine work of art, while the two towers of exquisite workmanship were completed in the nineteenth century.



W E BOWERS

GOATS THAT PROVIDE THE FINE CHEESE OF OBERSTDORF AMONG THE BAVARIAN HIGHLANDS

In the highlands on the southern borders of Bavaria are several peaks between 4,000 and 8,000 feet in height, the loftiest rising to 9,710 feet. They abound in charming points of view and many of them are easy to climb, thus providing a favourite holiday ground for numerous enterprising tourists. The Alpiu Alps traverse the south-western corner of Bavaria and contain many lofty peaks, the highest, known as the Mädelegabel has an altitude of 8,681 feet. The district is renowned for its excellent butter milk and cheese, and many delightful scenes are witnessed such as the above at Oberstdorf, a favourite summer resort.

From the Feldberg group a number of streams radiate outwardly as tributaries to the Rhine and Danube. A peculiar phenomenon worthy of note is that from the little town of Immendingen on the source of the Danube a subterranean channel leads to the river Aal which flows into the lake at Constance and thus makes of the upper Danube a tributary of the Rhine. The Danube reinforced by another stream from the Black Forest then resumes its course as if nothing had happened.

The Black Forest also has its lakes, two ancient volcanic craters, very large and still reflecting the sombre lines of the fir trees that grow in scattered clumps far up the mountain sides to those fertile regions where even such hasty growth as it is find sufficient encouragement. The erosion of the granite heights of the Black Forest provides a generous soil in the sheltered valleys where below the zone of conifers are forests of oak and beech and edible chestnut, fat pastures and vineyards.

Thirteen-year Cycle of Tillage

Yet more difficult is the southern boulder-strewn plateau. But here, on account of the heaviest rainfall in South Germany, grazing is poor and large herds of cattle are raised. There are, however, in this country some favoured islets where man's primary occupation of arable farming gives rich returns for his efforts. The alluvial soil round the volcanic mass of the Kaiserstuhl and the valleys that wind upward into the forest are extremely fertile. Then again in the extreme eastern angle of this country, sheltered by the Bohemian Forest, lies a favoured strip of land for cereal of all kinds. Hops, too, thrive well on both banks of the Danube about Ratisbon.

A quaint local occupation connected with forestry is peculiar to the valleys of the Black Forest in its southern extremity. Here the hill-sides below the belt of conifers are covered with oak scrub. This undergrowth is cut every 15 years or so, the bark is stripped off for the tanneries, and the smaller

branches are taken and burnt on the spot. In the following year the ground thus enriched is tilled for corn. By the second year after the burning the tree stumps, apparently none the worse for firing, have sent out from too trunks to permit of tillage for another 15 years. This somewhat rough and ready method contrasts strongly with a delicate local industry the products of which are known all over the world over almost every creek and brook that is said to hail from the Black Forest.

Mountains Torrent of the Jura

From the southern range of the Black Forest from the Black Forest of the Swabian and Franconian Jura a number of streams and rivers race down a rapidly declining descent to the fair fields watered by the Neckar and the Main. The valleys of these water courses in their upper reaches are narrow, steeply flanked in places by sheer rocky precipices, decked with forest and crowned with ruined castles, while timbered houses, hingle-roofed, peep out from among vineyards and orchards in the sheltered places. The valleys widen out and rivers flow at a more even pace through broad land of fertile alluvium.

Prosperous Valley of the Neckar

Of all the rivers of Germany, with exception of the Rhine, the Neckar is the most famous in legend and song, and the country through which it flows is considered the Park of Germany. It is indeed a lovely valley, sheltered, sunny, rich in soil which in turn richly rewards the efforts man makes in cultivating it and leaving to man after his day's work, time to recreate himself. No wonder then that this Neckar valley is the most densely populated part of South Germany. Here in the Neckar country are salt mines to old chemical factories, health-giving springs at Heilbronn, two universities—Tübingen and Heidelberg—and manufacturing centres at Füssen and Stuttgart, the capital of Württemberg.

The Main river, starting out from the austere heights of the Fichtel Gebirge, now learns to smile as it enters the plains the basin of Bamberg, the market garden of South Germany. On its way it picks up the Regnitz, and establishes a water connexion with the Danube past Nuremberg, and through a depression in the Franconian Jura. At Bamberg the river becomes navigable and flows on between vine-clad terraces through Würzburg and to Frankfort, where it enters the field of commerce.

Quaint old German towns cluster about these valleys. Some slumber in historic repose like that gem of medieval architecture, Rothenburg ob der Tauber, others have upheld and increased their importance. Nuremberg on the ancient trade route from Italy to the north stands with its keep and ancient walls, its gabled houses and wrought-iron work, much as in the days when Hans Sachs cobbled and sang to his work.

Wurttemberg, with the ragged strip of Hohenzollern territory entering into its southern border, is obviously the result of military operations by lords of Wurttemberg supporting Ghibeline or Hapsburg emperors against obstreperous Guelphs in Bavaria, and the political borders of Baden show as little regard for geographical features

as do those of Wurttemberg. Baden as a political entity is just a long strip of extremely fertile country on the east bank of the Rhine, with patches of territory acquired at either end of this strip by a succession of margraves and dukes. The state of Baden grew out of small beginnings and around a spot famous the world over, Baden-Baden—or, more correctly, Baden in Baden. The name suggests its origin, for here are the healing waters known to the Romans, whose town of Aurelia rests under the foundations of the present watering-place.

The third, and last, sub-division of South Germany comprises the uplands of Hesse and the Rhine province. Ridges of silurian and granite rise out of the Lorraine plateau and curve away towards the north-east. The Rhine forces a passage through this mass, its broad valley intensely fertile, the hill-sides terraced vineyards. There are many familiar names, such as Nierstein, Rudesheim and ancient cities like Worms and Speyer. Beyond the Rhine Taunus and Westerwald, separating Main from Lahn and Lahn from Sieg, extend towards the north-east where their symmetry was destroyed by volcanic eruptions culminating in the desolate Rhön Mountains.

GERMANY SOUTH GEOGRAPHICAL SUMMARY

Natural Divisions. A border zone between the North German plain and the Alps, an undulating passage-way between France and the Danubian lands. Mainly composed of ancient pre-Alpine block mountains of Central Europe worn down and eroded to smooth yet massive outlines. In the south and south-east the valley of the Upper Danube, in the north the valleys of the Main and Neckar, in the west the eastern half of the rift valley of the Middle Rhine.

Climate and Vegetation. Rainy and cold on the heights the climate is, on the whole, cooler than that of the plains to the north, yet the valleys and sunny slopes receive the warmth of their southerly latitudes. (Contrast the Tyrol.) Naturally forested (cf. Black Forest, Thuringian Forest as place names), with the open summer meadows of the uplands and the cultivated valley floors.

Products. Forest products, timber and toys. Wine, wheat (i.e., spelt, an impure wheat mixture), maize, tobacco, hops. Beer (Munchner lager). Cottons in small quantities. Pigs and pigmeat.

Communications. As a passage-way cross routes from the Rhine to the Danube (e.g., the Rhine-Danube Ludwig Canal from Bamberg on the Main), cross routes from the German plains to the Italian plains which have determined the growth of Frankfort, etc.

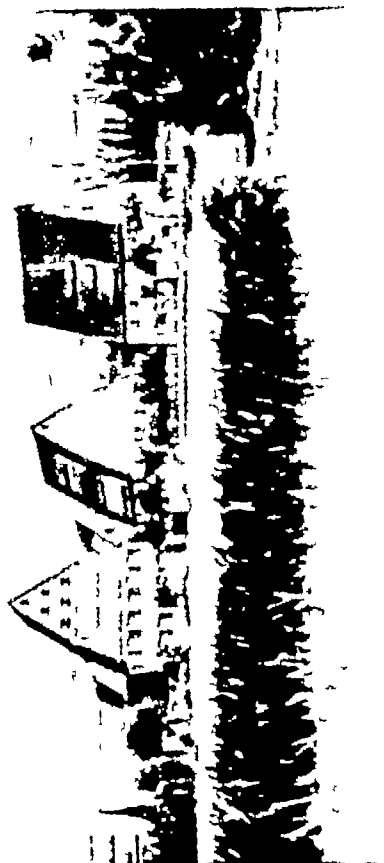
Outlook. Forced by their environment to depend upon the land and its products, situated in a transition zone, containing zones of difficulty where life is severe and zones of effort where men are dour, lacking coal and iron and their consequent industrialism, Germany South should progress more successfully after the pattern of the Swiss than of the Germans of the northern plains.



SOUTH GERMANY To see the Markusturm of Pothenburg, Bavaria, remnant of the earliest town-walls, is almost to revisit the Middle Ages



SOUTH GERMANY The lovely scenery of the Rhine gorge with its vine-clad, castle-crowned slopes between
 Bonn and Cologne is far famed. In this section lies St. Goarshausen, watched over by the romantic Katz Castle





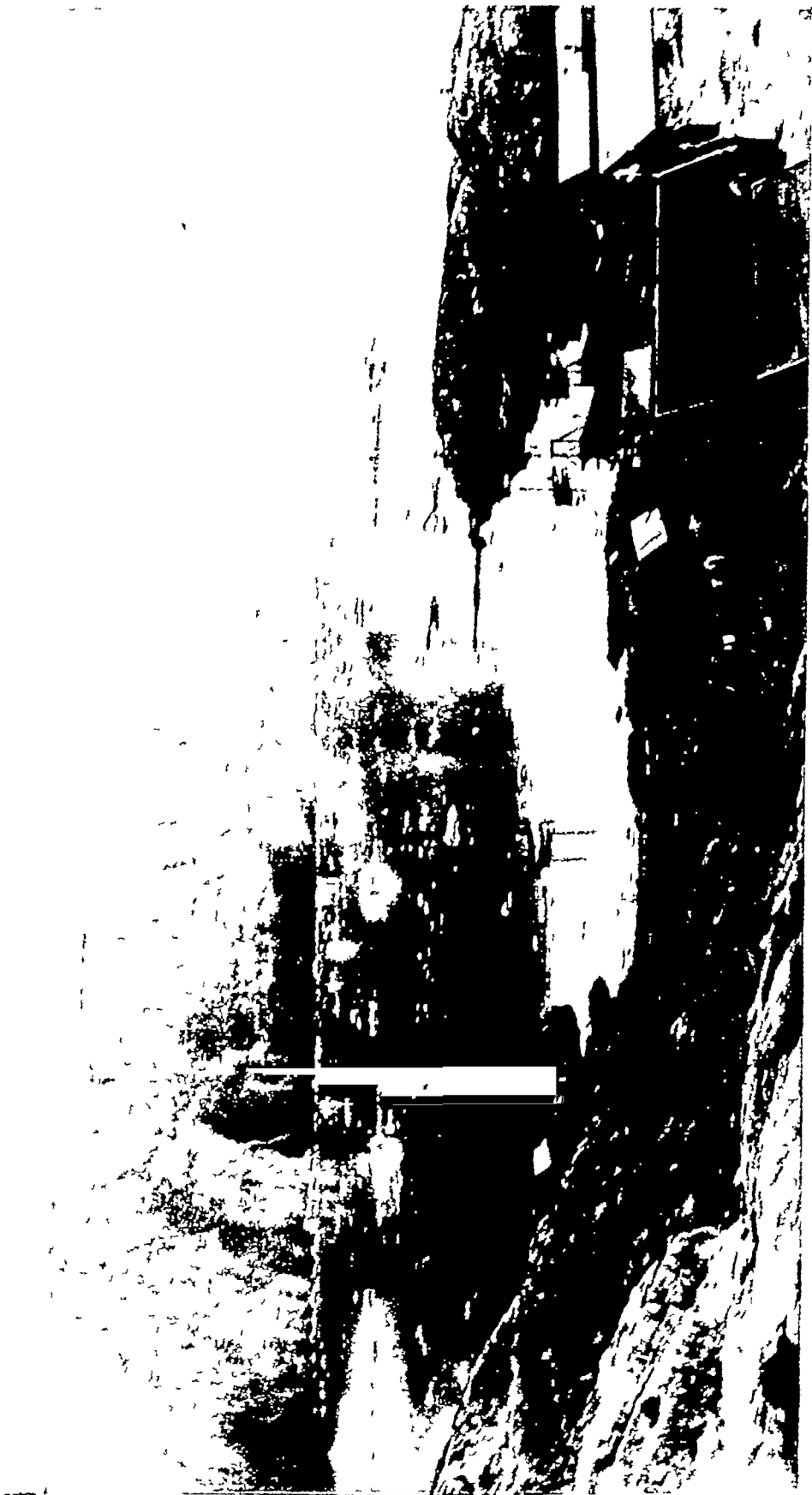
GLASGOW — Rising proudly on a hill above the Kelvin the stately minster with its central 200 foot tower is a landmark for many miles.



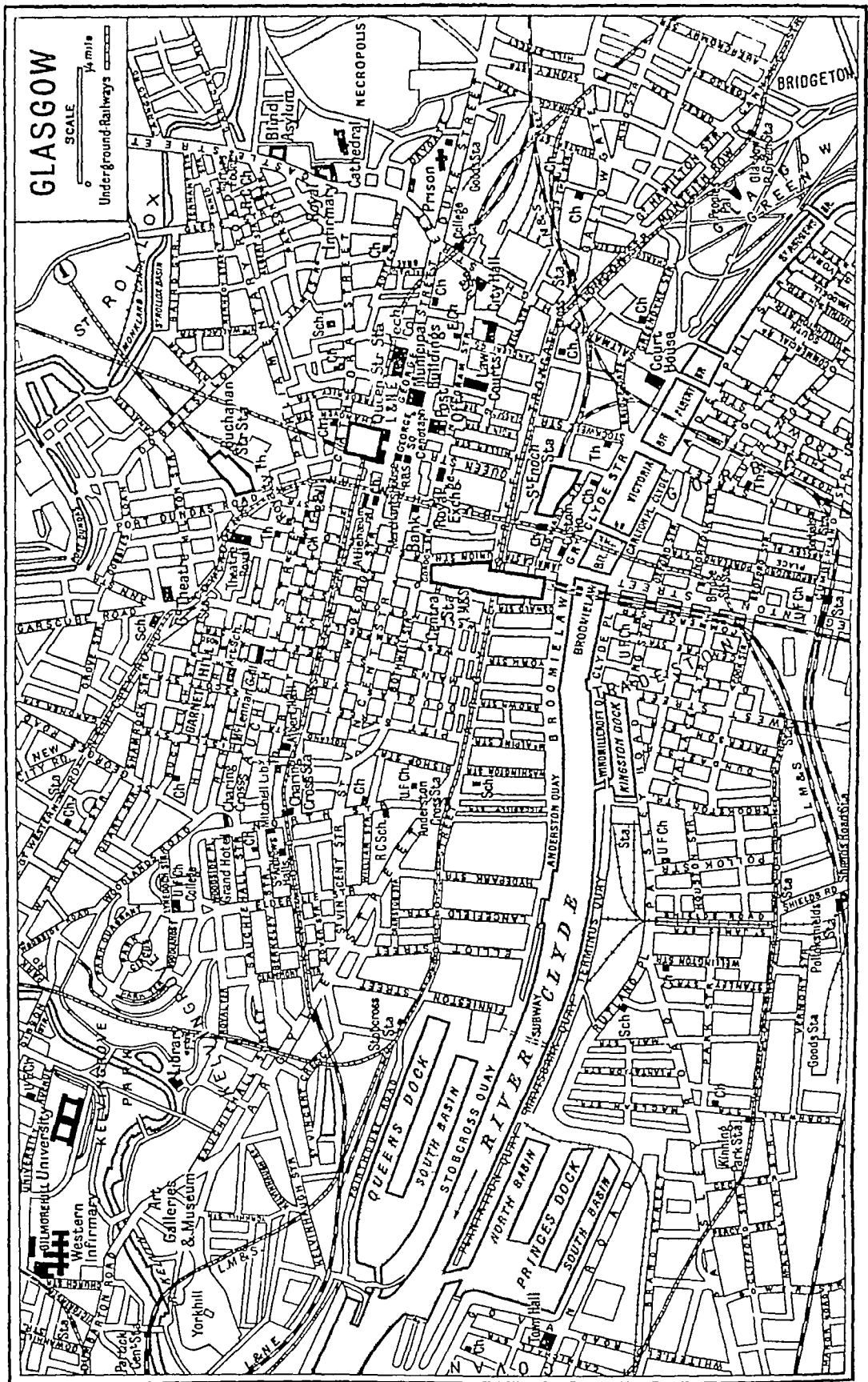
GREECE The Meteora Monasteries in Thessaly were founded high on the summit of pillar-like rocks in the turbulent fourteenth century



GRATER. In the center lay at the foot of the formation hill of the river. Of it is the only one of the



GREENLAND Unalak Settlement commands a view of the fjord, of indescribable grandeur and harmony of colour, rugged cliffs rise sheer from the ocean, and glistening icebergs float on the ice-cold Arctic waters



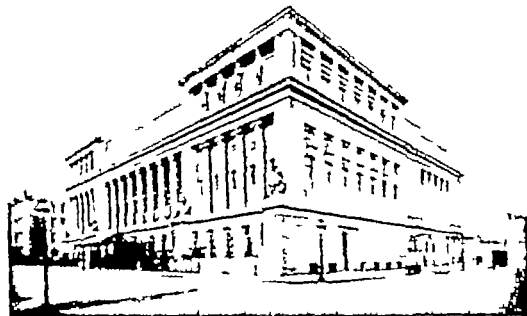
INNER GLASGOW, ITS CHIEF STREETS AND STATIONS WITH THE DOCKS AND QUAYS BY THE CLYDE

the most Mountain winds blow over from the Heather of the Cairngorms and the Cairns, and the westerly winds claim in sea west wind that they smell sea air.

For the visit from the southward rail way system, the junction of the Glasgow, London, Midland and Scottish and the London and North Eastern. To find train at any of these three terminals to put in immediately at a terminus that is put in a tent of human that is extremely at a price for the visit with few

and I all the bridges across the Clyde at Glasgow, a river length of a few hundred yards, the two of them carry in tramway lines make "bottle-necks" that prevent a junction which will be difficult to be left for another and be tolerant generation to solve.

Parallel with the river runs one of the oldest but not the most famous—Argyle Street—a westward projection of the Tregate, a whole plantation (growing) and under whose dappled area the old places of the



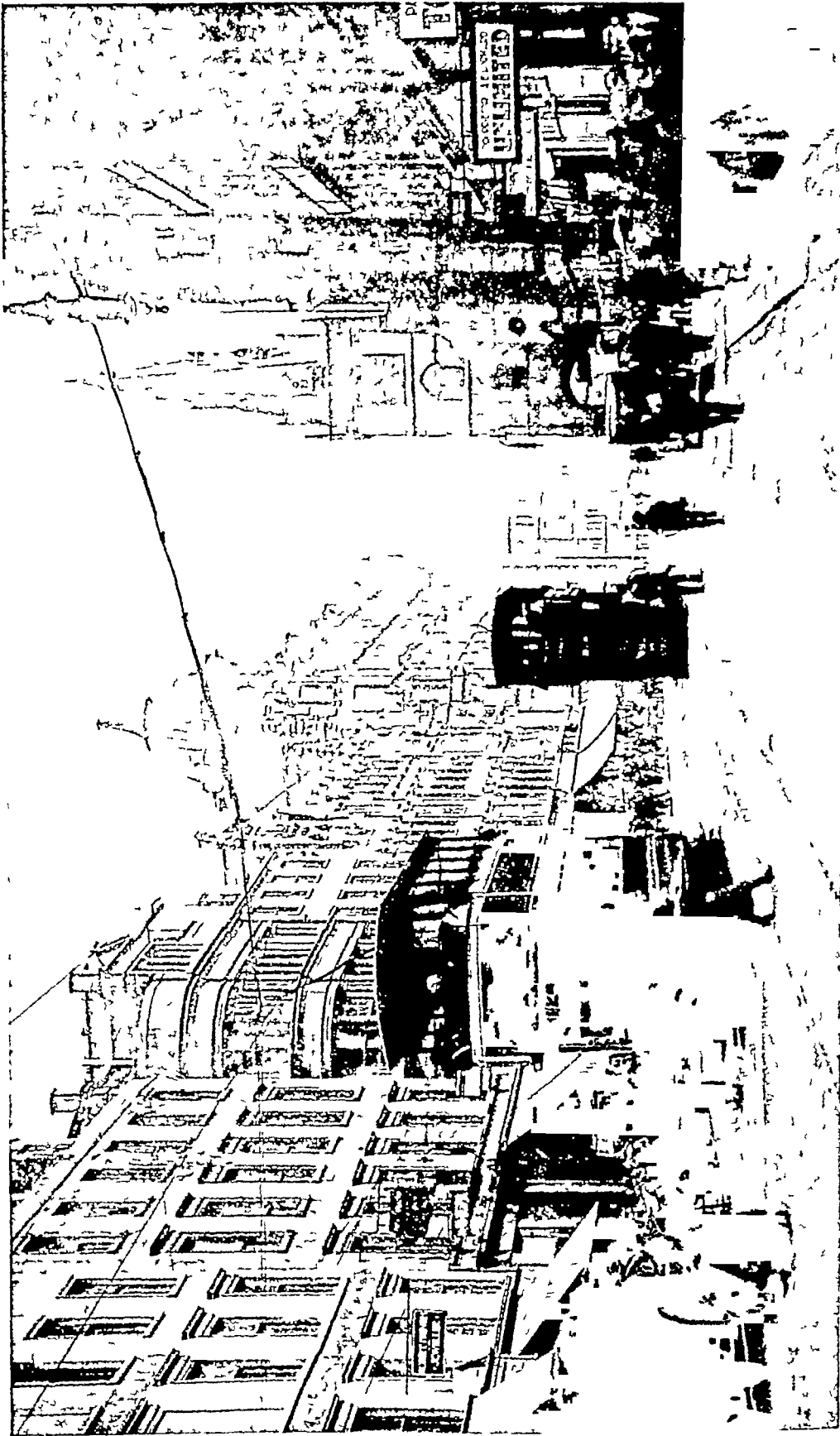
ST. ANDREW'S HALL, THE LARGEST PUBLIC HALL IN GLASGOW

1. The building is situated on the corner of the street, and is a large, ornate, multi-story building. It is the largest public hall in Glasgow. The building is situated on the corner of the street, and is a large, ornate, multi-story building. It is the largest public hall in Glasgow.

exceptions are laid with rules of tone. It is doubtful if in any other city in the world the electric trolley tramcar has so arrogantly taken possession of the central thoroughfares. The corporation has a tram service of wonderfully cheap fares and far-extending reach which is run with the utmost enterprise and with great profit to the civic treasury, but in the central bus lines and hopping area the cars create congestion due to the fact that the river divides the city into two parts north and south. A jealous preservation of their wharfage limits by the shipping interests has

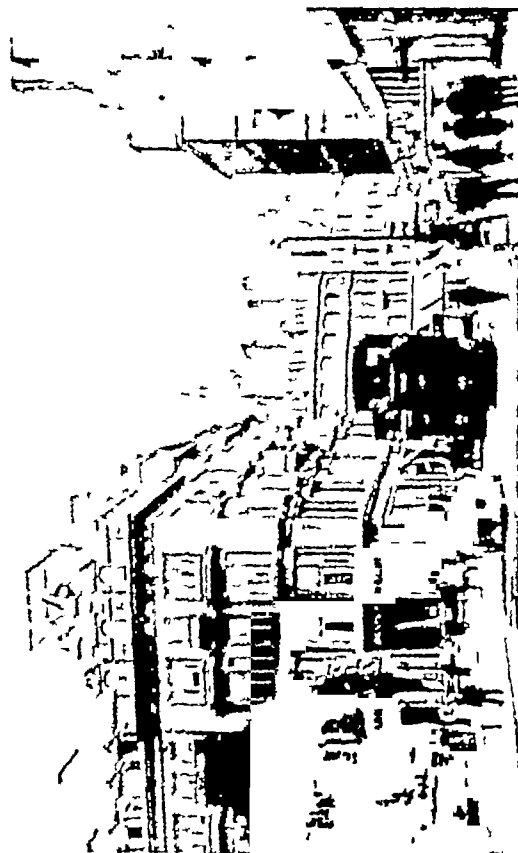
eighteenth century warehouses. Argyle Street has at its eastern extremity some imposing warehouses and along most of its length a frontage of thriving shops. Probably more money changes hands there than in any other half-dozen of its rival, but it is as a rule to Buchanan Street and Sauchiehall Street that seeks of the recherche flock.

Buchanan Street at its lower end, is the resort of the city's wealthiest shoppers and is sacrosanct from tram-car intrusion but at its upper end degenerates rapidly in dignity till it reaches a station of the London



LOOKING DOWN TRONGATE TOWARDS THE CROSS WITH THE TWIN STEEPLES OF TRON AND TONTINE

Trongate is an extension of Argyle Street terminating at the Cross where High Street, the Salt Market and Gallowgate converge. The "Phinestones" before the Tontine buildings in the left distance were formerly a fashionable promenade, and the Tontine Steeple, 113 feet high and having a fine chime of bells, is a relic of the old Tolbooth. The Tron Steeple on the right, 126 feet high and erected in 1637, was formerly attached to St Mary's Church, which was destroyed by fire in 1793 and is one of the few remaining landmarks of old Glasgow, for Glasgow, unlike Edinburgh, has hardly any remains of the past



CHARING CROSS, THE PRINCIPAL WEST END CENTRE OF TRAFFIC IN THE GREAT WESTERN CITY OF GLASGOW

1. The main entrance to the city of Glasgow is through the West End, which is the most fashionable and expensive part of the city. The West End is the home of the aristocracy and the wealthy, and it is here that the most beautiful buildings and the most famous landmarks are to be found. The West End is also the centre of the city's social and cultural life, and it is here that the most important events and the most famous people are to be found.

Midland and Scottish Railway less imposing than the Central which is one of the finest stations in Europe

Shopping Centre of the North Side

Parallel with Buchanan Street, running south and north, is Union Street, which changes its name midway in its course and becomes Renfield Street, most crowded of car routes. To the right and left of it open up streets dedicated to shops and business premises, banks, lawyers' chambers and insurance offices, which latter, in recent years, have been changed from dingy old low-browed blocks into soaring and handsome edifices. The final street to which an inquisitive stranger seeking Glasgow's more imposing shops may trouble to go is Sauchiehall Street, briskly animate in the afternoon with womenfolk attracted by splendid warehouses in which the art of window display is seen at its best. The name, which always impresses the stranger, is derived from "sauch"—the Scots for the willow-tree. Sauchiehall Street is a survival of more pastoral days in Glasgow.

All the places named are on the north side of the river, the south side, cut off entirely by the river from any railway terminus—and unfortunately so, as is now in part realized—is more of a factory and working-class residential area, though on its outskirts lie some of the most charming of gardened villa areas. The extreme north and east of the city by their smoke-stacks proclaim afar their character. To reach the cathedral one must traverse distinctly "East-Endish" quarters, probably the High Street, old as the Middle Ages, but wholly transformed and modernised.

Nucleus of Old Glasgow

An erection of the twelfth century, the cathedral stands on the site of a much older edifice dedicated to S Mungo, the city's patron saint. Its bells once rang across meads and gardens, and wild birds sang on the

banks of the little Molendiner, now degraded to the status of a subterranean drain-pipe. The exterior of the cathedral may disappoint, but—except for some amazingly bad painted Munich glass—the interior is impressive enough, and the crypt is probably the best in Britain. Round the cathedral, and between it and the Clyde, grew old Glasgow, behind it on a knoll rises the Necropolis, an age-old cemetery.

The Green in the east end, Kelvingrove in the west and the Queen's Park on the south side are the city's oldest "lungs" or open spaces, each in its own way preserves natural features to remind the citizen of what rural aspects and surroundings communal growth and industrial prosperity have bereft him. It is in Kelvingrove that Glasgow's great and always successful International Exhibitions have been situated. Reflected in the Kelvin river, tributary to the Clyde, are the walls of Glasgow University which until 1870 was in the High Street. Here, too, are the city's imposing and extensive Art Galleries.

Parks Many Miles Away

But there are many other parks and playgrounds round the city—Rouken Glen and Cathkin Braes for instance, unsophisticated and altogether charming, and the city even owns truly Highland parks on Loch Lomond and Loch Goil, twenty to thirty miles away among hilly solitudes.

Parks, galleries, libraries, police, tramways, baths, lighting and cleansing departments, museums, halls and even some older city churches—they are all controlled by the city corporation, which also brings the most perfect and inexhaustible of water supplies from Loch Katrine, thirty miles away among mountains glorified by the genius of Walter Scott. Seeking the administrative centre of all these communal "utilities" one must go to George Square, in the city's modern centre, where are situated the municipal buildings. The area they cover, the



GORDON STREET SHOWING THE CENTRAL STATION ON THE RIGHT

This is a view of Gordon Street, Glasgow, looking towards the Central Station. The street is wide and paved, with a central line for horse-drawn carriages. The buildings on either side are tall and multi-storied, with many windows. The Central Station is visible on the right side of the street.



VISTA OF BAUCHIEHALL STREET THE REGENT STREET OF GLASGOW

This is a view of Bauchiehall Street, Glasgow, looking towards the Regent Street. The street is wide and paved, with a central line for horse-drawn carriages. The buildings on either side are tall and multi-storied, with many windows. The Regent Street is visible on the right side of the street.

solid majesty of their outer walls, are in keeping with the great importance of their purpose as the heart of the civic government, controlled by a lord provost and seventy-six magistrates and town councillors, including two representatives of the city's ancient trades and guilds

Spring Flowers in George Square

George Square itself, at the gates of the London and North-Eastern terminus, is the only considerable open space in the city proper—a "place," in spring and summer time when the parterred flowers are out, of some attractiveness, surrounded by several of the handsomest buildings in the city, including the Post Office and the Merchants' House, and just a little too opulently adorned by statuary

In its centre rises a lofty column to Sir Walter Scott, and there are statues to Queen Victoria, Prince Albert, Burns, Peel, Gladstone, Thomas Campbell, David Livingstone and others, with a cenotaph to the memory of the city's fallen in the Great War

The Ubiquitous Tenement

As in most industrial cities, examples of real architectural distinction have to be looked for, and refined and elegant work in ecclesiastical and business buildings of the nineteenth century are fairly numerous. But for the stranger the most surprising architectural feature is likely to be found in that all-prevalent and peculiarly Scottish institution, the residential "land" or tenement. The vast majority of Glasgow's people live in flats or parts of flats, using a common stair to reach their domiciles. The principle has its analogue in France, but tenemental blocks in Glasgow have no presiding concierge at the entrance. At their slummiest they are divided into "one-room houses," the city's most sordid social problem, at their best the flats are commodious and comfortable, equipped with every modern convenience and in great favour with the less opulent of the professional classes

To the visitor from brick-built and stucco cities elsewhere, the solid masonry with which even the humblest homes in Glasgow are built is striking

From the plateau of Gilmorehill, on which the university stands above the pools and groves of the river Kelvin, the city presents itself as a great expanse of uniformly-slatted grey buildings throwing up here and there innumerable towers and steeples and, more distantly, some of the tallest factory chimneys in Britain. The university itself—though not of course in the present buildings—was established in 1451 by a bull secured from Pope Nicholas II through the influence of Bishop Turnbull, and is the second oldest of the four Scottish universities, St Andrews being the first

Scotia's Second Oldest University

The number of students, of recent times, has increased enormously, and curiously enough, most rapidly during a prolonged period of national unemployment, when the youth of Scotland seeing no avenues for their energy elsewhere, ardently wrought for "bursaries" or scholarships to carry them into the learned professions

About 5,000 men and women take the arts, science, medical, legal and divinity courses. They are not resident in the college, which, unlike its predecessor in the High Street, has no intramural accommodation for them, they live in their own homes, in hostels or in lodgings. Among them may be found, in the same class-rooms with the sons of merchant princes, students of many Eastern races and "lads o' parts" from every locality of the Western Highlands and the Hebrides, where the ambition of many humble crofters is to have at least one son in a learned profession. There was a time when the aristocracy of Scotland did not disdain to send their sons to Scottish universities, rarely indeed do they send them there now

Though the classics—the "humanities"—have a high place in the Glasgow University, its scientific side has greatly developed, and of nineteen Chairs

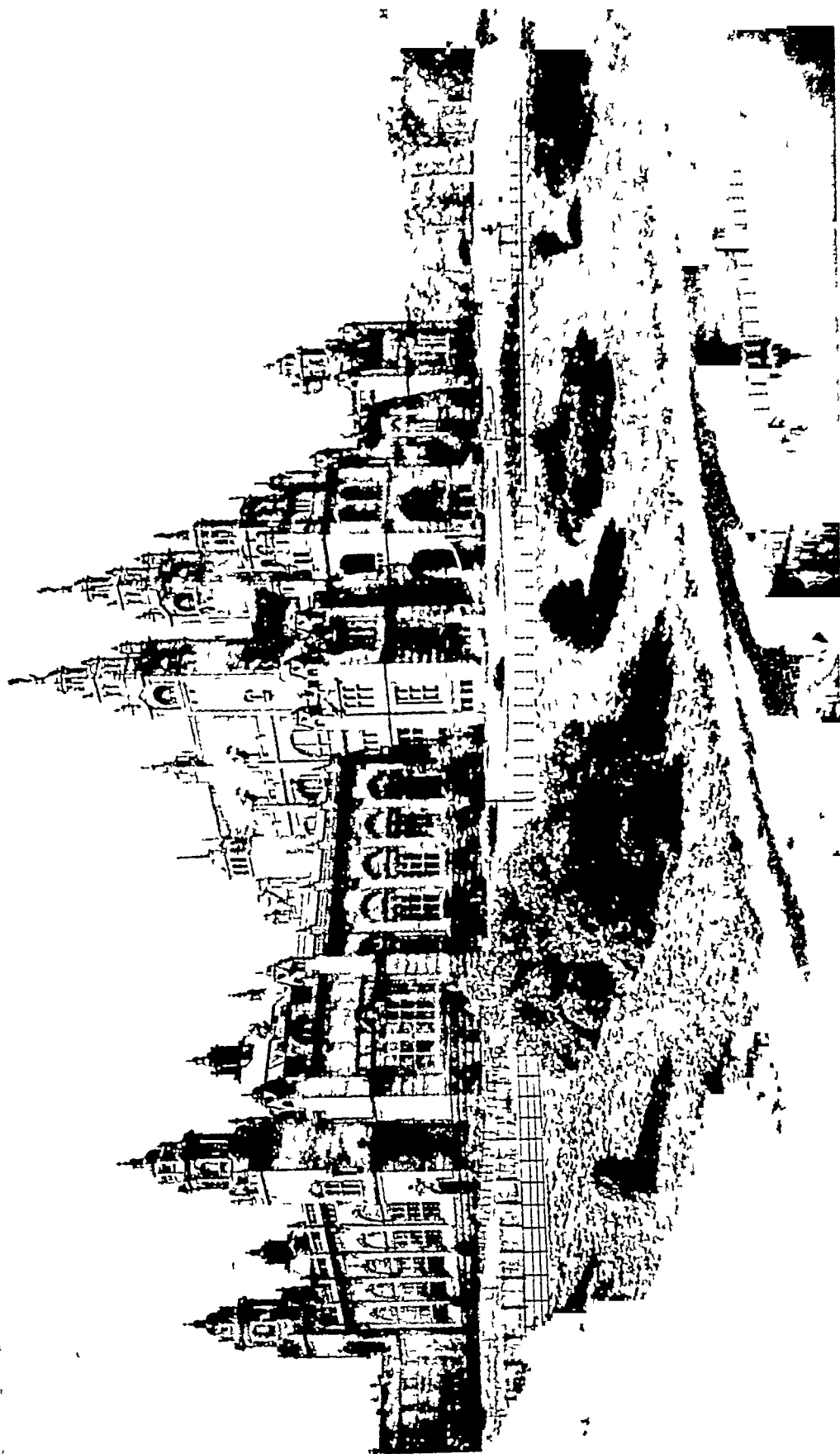


In front of the magnificent Corinthian building of the Royal Exchange stands the equestrian monument to the Duke of Wellington

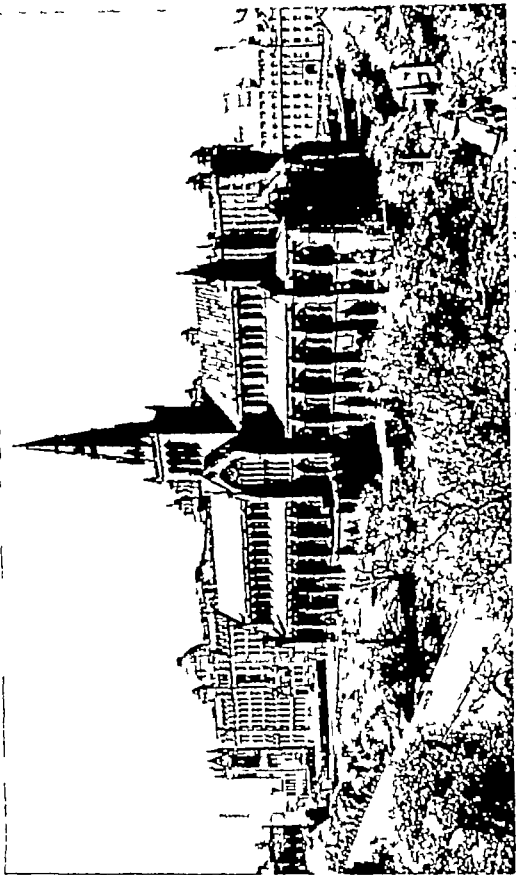


GLASGOW North Street façade of the fine Mitchell Library it is the second largest library in Scotland and contains the Jeffery Library

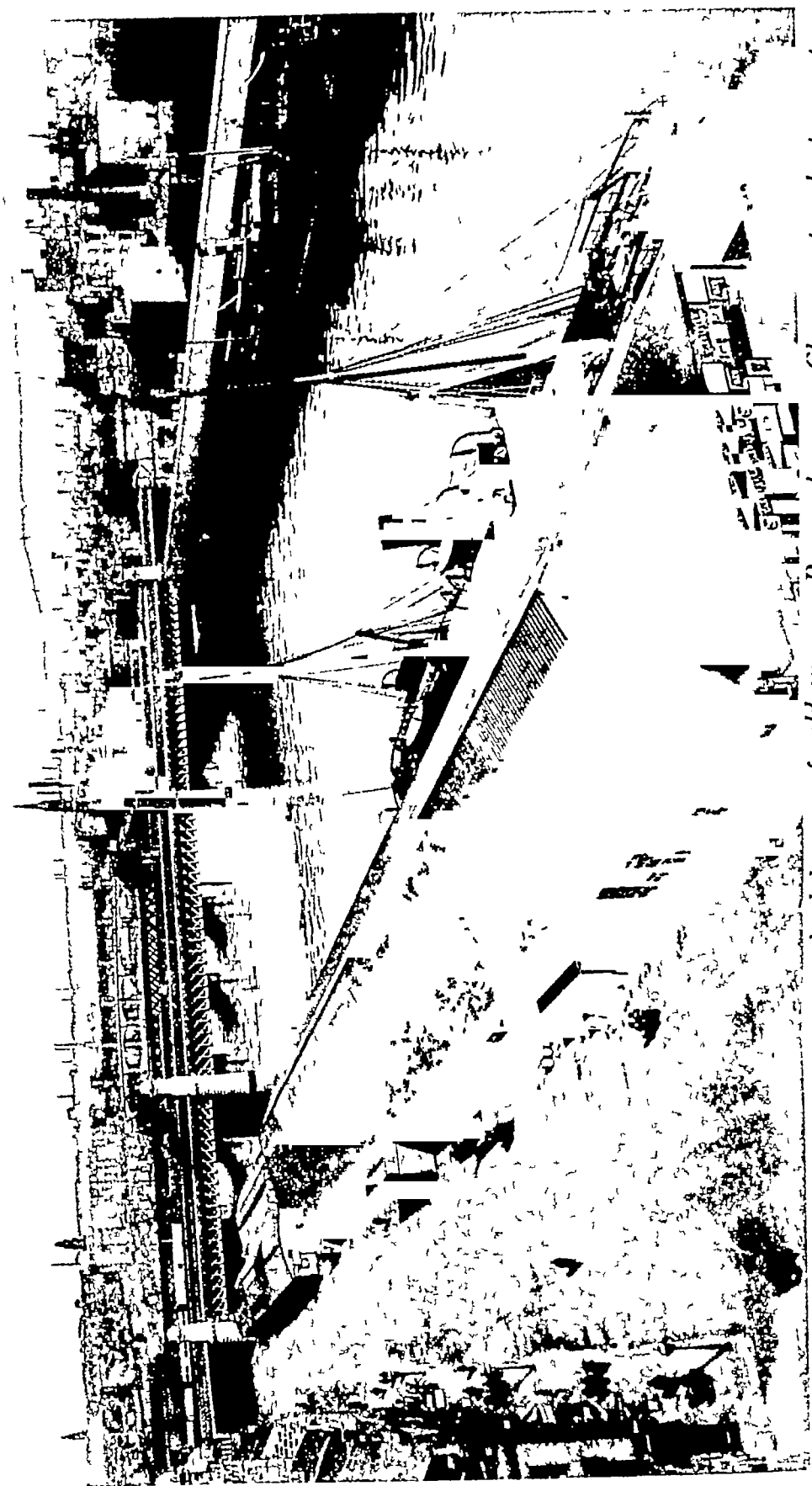
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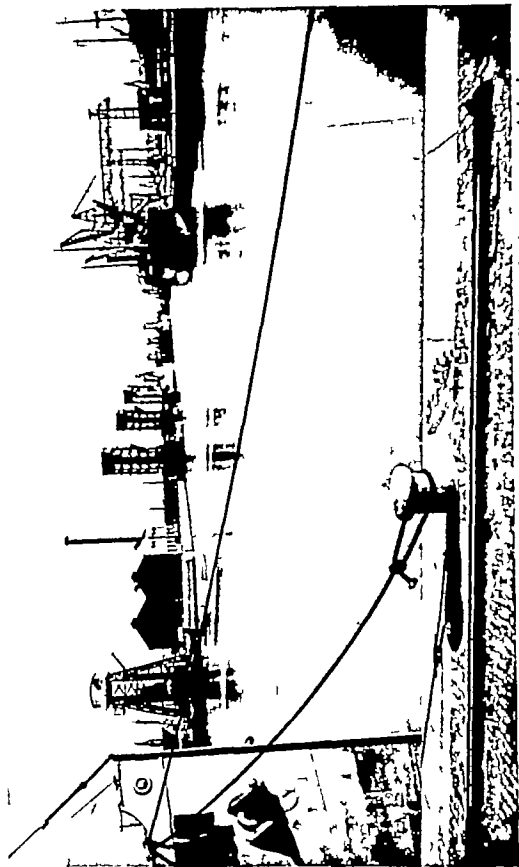
GLASGOW The red sandstone building of the Corporation Art Galleries, built in the French Renaissance style, with the twin central towers standing out in bold relief, forms an impressive and beautiful picture



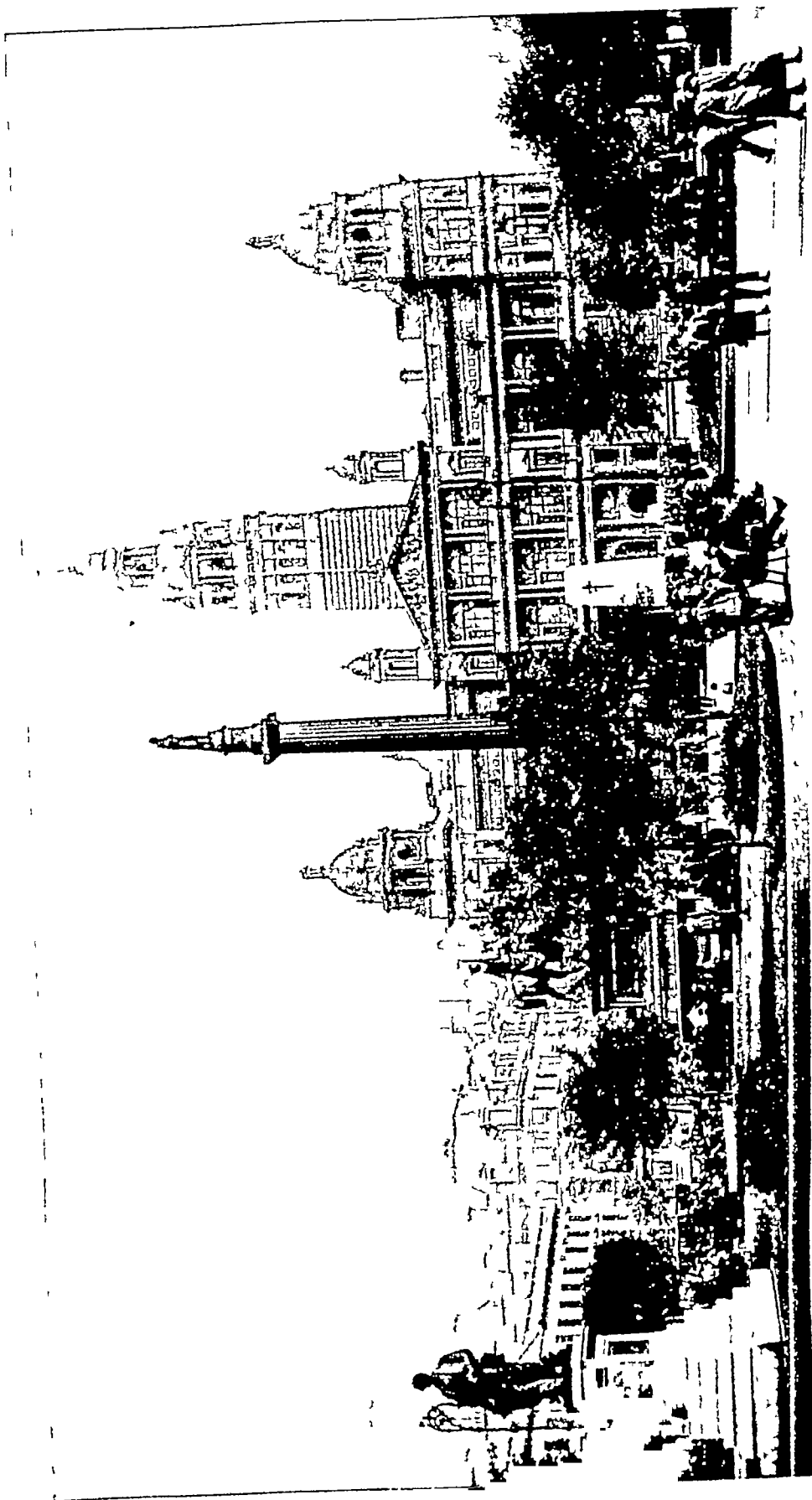
GLASGOW S Mungo's Cathedral the most perfect example of pre-Reformation (catholic) architecture in Scotland
erecting in its simplicity was founded in 1123 in the site of a church erected in the sixth century



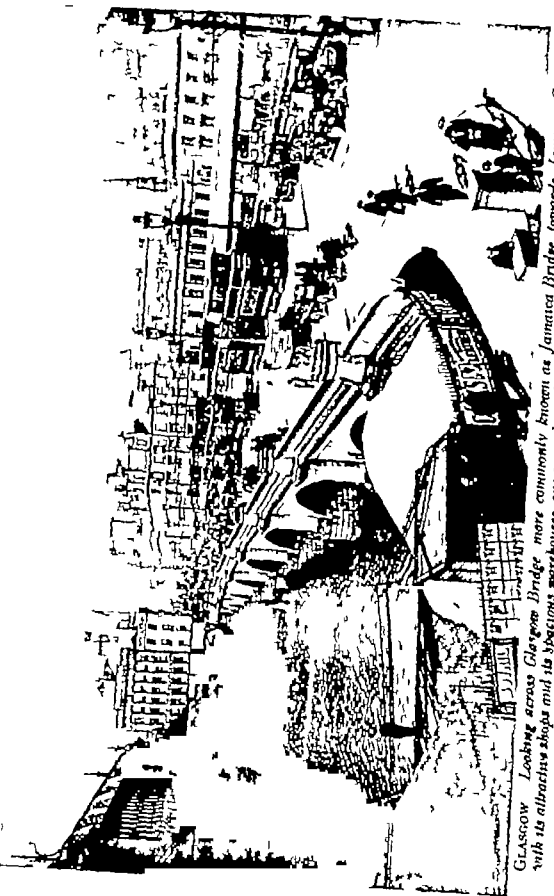
GLASGOW *Once the broom was a splendid mass of gold in grey Broomielaw ere Glasgow spread its great tentacles of factories, warehouses and foundries up and down and across the Clyde*



GLASGOW Ships from all the seven seas are gathered together in Rotheray Dock receiving and discharging cargo and on the stocks are huge skeletons of vessels in even stage of construction



GLASGOW George Square is the centre of the city's administrative life The Municipal Buildings are in the Italian Renaissance style, and the fluted Doric column of the Scott Monument soars above the War Memorial



GLASGOW Looking across Glasgow Bridge more commonly known as Jamaica Bridge towards Jamaica Street with its attractive shops and its spacious warehouses one sees where the railway from Carlisle crosses the river Clyde



GLASGOW On the right bank of the Clyde, between Rutherglen and Ilbert Bridges, is Glasgow Green with the Nelson Monument, an obelisk 144 feet high, in the centre and S. Andrew's Suspension Bridge on the right

founded in recent years by public spirit and merchant-lipowners and manufacturers, nine are on the medical side, four in technical science and several in modern languages.

A part of the building on Cuthbert Hill is occupied by the museum founded by William Hunter M.D., one of the most distinguished alumni and graduates of the university and containing his valuable collection of book manuscripts, coin, paintings, anatomical preparations, zoological and architectural relics, many of the latter being precious finds from the Roman Wall which ran between the Clyde and Forth.

Howler in the city is the Glasgow and West of Scotland Technical College, claiming to be the first technical school in Great Britain if not in Europe. It was established in 1875 and occupies extensive and handsome premises in George Street.

Choice Selection of Old Masters

On the opposite side of the Kelvin from the university are the city's Art Galleries and Museum—in a great and highly original and most picturesque spot in the heart of the French Renaissance city of architecture. Simplicity combined with elegance marks the interior devoted to the Fine Arts, Industrial Art and Natural History; the picture section includes an exceptionally valuable representation of the old Dutch and Flemish masters and of the most notable painters of the modern British and Continental schools.

Next to London's National Gallery collection that of Glasgow at Kelvin Grove is probably the most representative in the kingdom. Of its several Rembrandts the "Man in Armour" is by far the best—more virile in its spirit and in composition, colour and atmosphere earned much farther than Rembrandt's "Lallas Athene" at the Hermitage, Petrograd, which looks like a preliminary sketch for the Glasgow canvas. Van der Goes's "St. Victor and Donor," the "Adulteress Before Christ" (a superb work, whether by Giorgione to whom

it is attributed or by a pupil) and Whistler's portrait of Carlyle with choice examples of Corot, Jordaens, Troyon and Monticelli are not likely to be overlooked by the discerning.

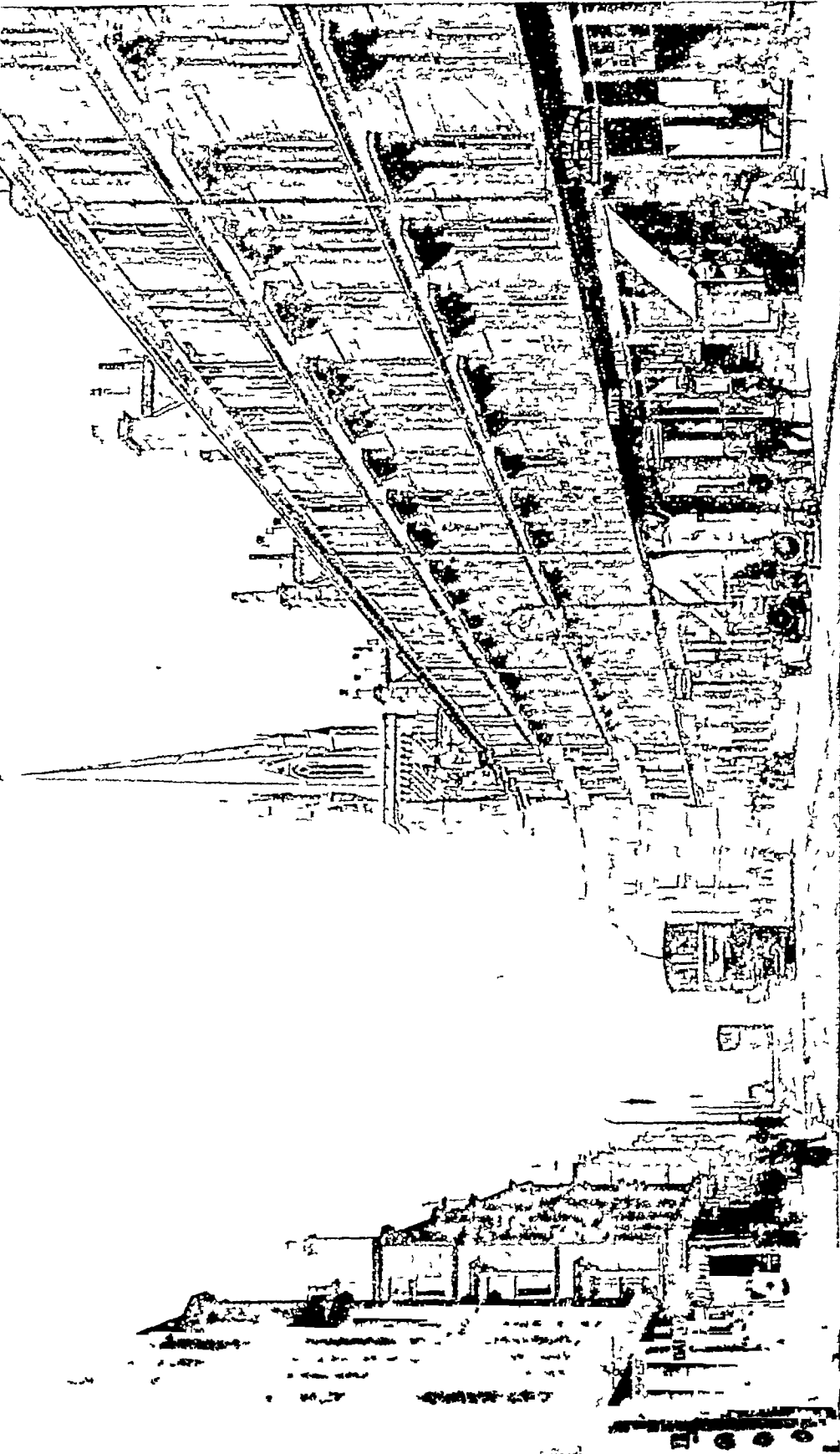
A City for the Artistic Best

For all its preoccupation with trade and manufacture Glasgow has long had an eye for the best in practical and decorative art. Its merchant princes were among the earliest patrons of modern Continental and English painting, and regarded it as their corporation duty to lift wisely from the same quarters and hand many practical gifts for improved work. There is no other city in the kingdom so full of life and with so many professional artists in it. The Glasgow School is a part of a century ago began to have a European reputation. The School of Art in Renfrew Street is one of the most potent educational agencies in the West of Scotland, here grow numbers of landscape and figure painters, graduate annually architects, designers, art teachers and decorative workers.

It is impossible to get a real idea of what Glasgow is without having seen the estuary of river between the Broomielaw and Bowling. The Broomielaw, so-called from the broom or plantain that flourished there when the stream was still only navigable so far for wherries and fisher-boats, is the oldest wharf and a little lower down than the railway bridges from which it may be seen. No spacious channel like the Mersey is here, but a fairway of 620 feet at its widest and 352 at its narrowest part. Nor do closely hemming warehouses appear to court disaster to their windows from the spars of ships as on the Thames.

Down the Clyde to Greenock

It is the starting place for the pleasure steamers that go down to the estuary and into distant Highland lochs, by boarding one of these a passage of an hour at most to Greenock reveals the maritime and ship-building river in its



Annad

GREAT WESTERN ROAD WITH THE EPISCOPAL CATHEDRAL CHURCH OF S MARY ON THE RIGHT

Great Western Road, a continuation of New City Road, passes through one of the finest residential portions of the city, and on the right-hand side, going west, is the cathedral church of S Mary, built in the Early Pointed style, and one of the most stately places of worship in Glasgow. A little further along on the same side is the Lansdowne United Free Church, built in 1863 in the Pointed style for Dr Laidie, and on which, it is said, was written on the day of consecration "This Church is not for the poor and needy, but for the rich and Dr Laidie."

every feature. First come the wharves lined by packets that ply to English and Irish ports, then berths where Atlantic, Mediterranean and Indian liners safely warp among countless hazards from tugs and unwieldy hopper dredgers, then the jaws of enormous docks where ships of every character from all the world are quartered.

Launching a Leviathan

Long before one reaches the ship-building yards is to be heard the clamour of the hammers, it is astonishing to see on both banks huge, far-extending yards, with the frames or hulls of monster vessels on their stocks. That they can be safely launched bow-on in such a narrow water may well appear incredible, but the thing is done, they are always launched at an angle up or down the stream and checked from reaching the farther bank by chains. A mammoth like the *Lusitania* slides down the ways into her "natural element" in 86 seconds, to be brought up by her 1,000-ton drags about 110 feet from the opposite bank.

Clyde built Boats Everywhere

There are few ports of the world where Clyde-built ships are not familiar, they are found in the strangest water, they have been taken by their own steam into Lake Baikal in the heart of Siberia, they have been put together in parts, like nursery picture-blocks, on inland seas and South African rivers, rajahs' paddle-galleys at Sarawak, missionary ships in Central Africa—there is no conceivable type of craft for which the Clyde is not always prepared to contract. The name-plates of the Clyde ship-builder and engineer are to be seen on the largest ocean liners and the most formidable ships of war.

For two reasons the Clyde can claim to be the greatest of ship-building centres. She is the mother lodge in the free-masonry of men who build fleets, whether in the Thames, Belfast or Stettin, for the first passenger steamboat in Britain was launched there and all

the great revolutionary discoveries in marine engineering were made or tested first on her banks.

Americans profess to find in the life and bustle of Glasgow much to remind them of cities in the United States. There is here no very visible leisured class except in unhappy times of national unemployment, the men who have made their fortunes usually retire to more sylvan scenes, though they need not go far since half an hour's journey from the city may bring one into exquisite landscapes—valley, moor, mountain or sea-coast.

For the vast army of workers, their leisure is confined very generally to a week or so of holidays at Glasgow Fair, when all but the remotest parts of Scotland resound to the "Glasgow accent" ("braid Scots" with a little touch of Irish).

A Tokio for Tea rooms

There are at least half a dozen imposing clubs of the more exclusive order in the city, but the most conspicuous social institution, now that the public-house hours are greatly limited, is the tea-room. "A very Tokio for tea-rooms," has been the visitor's comment. They are more numerous here, more artfully conceived, more varied and lavish in their wares, and more extensively patronised than anywhere else in Europe. A very old feature of the Glasgow tea-room is that customers are, as a rule, left to help themselves from well-laden tables, keep count of what they eat, and pay "on honour." Really good restaurants are limited in number, but in the centre of the city have sprung up some excellent ones, and with the dining-rooms and grill-rooms of the railway hotels they are thronged at mid-day. But late dinner in town is not to any extent a Glasgow habit, homes are too accessible.

As for hotels, the railway termini monopolise the best of them, there are seasons when the need for an increase in the number seems to be urgently required.

GREECE

Mainland & Isles of Ancient Culture

by Harold Spender

Author Lecturer and Authority on Greece

GRIEC, a maritime unit consists geographically of a peninsula and the island forming the Archipelago of the Aegean Sea and including the groups known as the Cyclades the Dodecanese (Sporades) and the Ionian Island. To the south lies the very considerable island of Crete politically united to Greece at the end of the first Balkan War.

Greece is deeply indented and possesses an immense coastline in proportion to its size. There are many good harbours and even more inlet that might be converted into harbours. The coastline is also protected at many points by islands like Corfu and Euboea which create natural roads in which shipping can lie in safety.

The whole history of Greece for the last century has consisted in one prolonged effort to create a proper geographical unit for her people. The settlement which terminated the War of Independence in 1830 left Greece with a very small homeland and a diminutive population. While there were some 5,000,000 Greeks in the world at that time only 1,000,000 were contained within the small area allowed to Greece by the Great Powers.

Territorial Vicissitudes

After the War of Independence Greece included only the Peloponnese Attica and Boeotia. Thessaly was added by the settlement of the Treaty of Berlin and was nearly lost again in the war of 1896. It was not until after the Balkan War of 1912-13 that the Greek people really took possession of their peninsula.

The Great War carried forward this development by extending the rule of Greece to southern Macedonia and the

islands of the northern Aegean. She failed to keep her hold over Asia Minor and was driven out after the war by the Turk in 1922. She also lost eastern Thrace and thus in spite of her great gains of territory there are now some 1,000,000 Greek people outside Greece.

Factors of Modernization

These facts very largely account for the continued disturbance of Greek politics and the unrest which characterises all her foreign affairs. Greece is still in the position of an uncompleted nation. Her full unity is not yet achieved.

Such as this is the importance of Greece is that she lies as the farthest Christian sovereign unit in the south-east of Europe. The deep thrust of her peninsula down into the Mediterranean gives her a splendid position for commerce and marine enterprise and the result is that she derives much of her wealth from ship-owning but it makes her very vulnerable.

Taken as a whole Greece is very mountainous. North and south her interior contains high mountain ranges amid which the plains are few although they have proved of immense historical importance. In the Peloponnese for instance the great plains of Argos and Sparta have played a vital part in history and the plain of Athens sheltered by mountains from the north has given to Athens her constant pre-eminence. Viewed from the sea Greece is everywhere a mass of mountains dominated by the commanding historic peaks of Olympus Parnassus and Helicon which have figured so largely in Greek mythology and literature.

Olympus and Parnassus can be seen—conspicuous by the shimmer and gleam



MOUNTAINOUS PROMONTORIES AND SCATTERED ISLES OF GREECE

of their eternal snows—from many parts of northern Greece, and their perpetual presences explain their influence over the Greek mind and their prominence in Greek literature

It is not only the coast that is mountainous. In extent and content Greece is one of the most mountainous countries in Europe. Tangled chains cover some four-fifths of the surface. In many parts the mountains run down almost to the sea, and the chief aspect of Greece as you approach it from the Mediterranean is this harmonious welding of mountain and sea.

Those who attempt to disentangle the ranges of mountains that make up Greece will find that their main feature is the great backbone which runs down the centre, right to the south of the Peloponnese. This backbone is called

the Pindus range in northern Greece, and gathers many other names as it runs southward until it ends with the five-fingered range—the "Pentadaktylon"—which runs into the sea at Cape Matapan.

From this main range of the peninsula, as from the Pyrenees and the chief range of the Alps, there run numerous other spurs. The mountains are continued even in the islands, which are nearly all hilly, especially Euboea, which has a conspicuous central range.

When Byron and Hobhouse travelled across Greece in 1809 there was no way of penetrating these mountains except by horseback or mule. Now there are a few good roads.

Taking the modern sovereignty of Greece, as fixed by the Treaties of

Lyttelton amending the Treaties of Nyon and Neuilly Greece has the following land boundaries: on the north the southern range of the Balkans group of mountains pivoting on Lalakli and running into the sea opposite the island of Corfu to the east the river Maritza cutting off eastern Thrace from Bulgaria; to the west the river Maritza cutting off eastern Thrace from Turkey; to the south the Aegean Sea. The population of Greece is now 1,100,000. The Maritza is the principal river of the country and flows north to the Persian

was announced at Lausanne in 1913. The Greek has as neighbours on her immediate north-western, from west to east, Albania, Serbia and Bulgaria, creating a grave political peril in case of hostile combination arising between those three states.

So far for the land frontier. With her defeat in Asia Minor in September 1922 Greece completely lost her hold on Asia, but her main impression of all this lies in the loss of the Dardanelles, which is the south-east of the Aegean, the strait of Asia Minor including the Hellespont. Her



John Smith

RUINS OF CENTURIES AGO BY THE VILLAGE OF ELEUSIS

famous as being the birthplace of the goddesses, the birthplace of Aeschylus, the chest of the three great Greek tragedians, Eleusis is also celebrated for its ruins of the worship of Demeter, the Liberator. My notes continue to be solemnly celebrated down to the end of the fourth century. The ruins date from the seventh and sixth centuries B.C., and from the Persian Wars and from the Roman period.

and several smaller islands. They were in the war of 1912 occupied by Italy, and a very complex diplomatic warfare is raging round their future possession.

The sea frontiers of Greece are the Aegean on the east, the Ionian on the west and the Mediterranean on the south.

Splendid Natural Harbours

The principal sea-inlets are on the west the Gulfs of Arta, Patras, leading to the Gulf of Corinth, practically an inland sea between northern Greece and the Peloponnese, the Gulf of Arcadia in the Peloponnese, the Gulfs of Coron and Laconia to the south, and on the east the Gulfs of Nauplia, Aegina, Volo and Salonica. If we add the shelter given by the great islands, Corfu, Levkas or Santa Maura, and Euboea, we shall fully realize that Greece possesses unique facilities of protection for her shipping.

But if Greece is rich in mountains and harbours, she is very poor in valleys and rivers. It is probable that the diminished rainfall due to the neglect of forestry by the Turks during their four centuries of occupation, has led to the dwindling of the rivers. For it is scarcely possible to imagine that the rivers of ancient Greece, which are spoken of so enthusiastically in Greek literature, correspond to the miserable little brooks of modern Greece.

Problems of River Drainage

The Ilissus, for instance, is now little more than a succession of pools during the summer. Macedonia has important rivers, flowing from north to south at almost equal intervals along the Macedonian coast-line—the Vardar, the Struma, the Myesta and the Maritza. The draining of these river valleys is the greatest of the enterprises lying before the Greece of the future, and will provide occupation and settlement for a large population. Hitherto this undertaking has been held back by wars, but peace and the League of Nations have opened up a new hope of achievement.

But taking northern Greece as a whole, the rivers are few and inconsiderable. The principal are the Salambria in Thessaly, the Arta in Epirus, the Achelous in Acarnania. They drain the central mountain range.

The classical streams still flow, but in diminished volume: the Spercheus, through the pass of Thermopylae, the Alpheus in northern Peloponnese, the famous Eurotas in Sparta, of which Byron sang in his historic appeal to Greece.

“Oh, who that gallant spirit shall resume,
Leap from Eurotas’ banks, and call thee from the tomb?”

and the Styx in Arcadia, with a fall of five hundred feet—not into Hades!

Romantic but Useless Streams

But the rivers of Greece play little part in her history or her wealth. They are none of them navigable: they are chiefly dry in summer and rapid and muddy in winter. Many disappear into the earth and reappear, like the Garonne in the Pyrenees. They are the haunts of legend and poetry, but of no value to the merchant or the traveller.

The low rainfall of modern Greece is the cause of the falling-off of her rivers. It is also the problem of her agriculture.

In a famous passage Herodotus describes a conversation between a Greek and an Egyptian, who has been singing the praises of the Nile as a source of fertility.

“But what if your river disappears?” asks the Greek.

To which the Egyptian replies

“What if your rain stops?”

To-day that reply rings true. The Egyptian had some reason on his side.

Yet Greece is plagued with marshes, especially at her river-mouths. The cause is probably to be found in the Turkish ignorance of the science of irrigation continued over many centuries. The draining of these marshes would not merely repopulate and reinvigorate Macedonia: it would also be

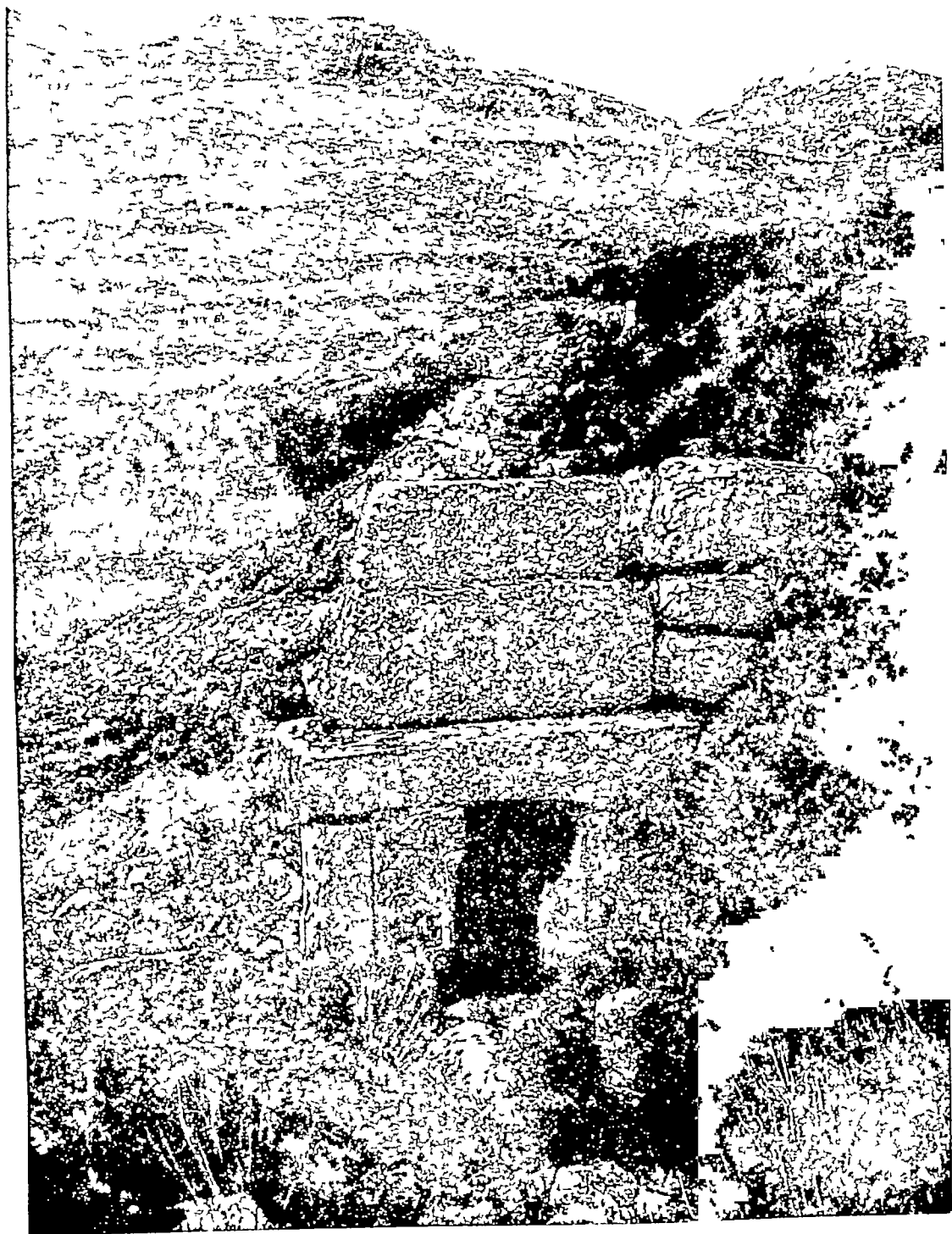


OLYMPIA SCENE OF THE GREAT FESTIVAL IN HONOUR OF ZEUS



RUINS OF DELPHI RENOWNED FOR THE FAMOUS ORACLE OF APOLLO

Delphi lay on the south slope of Mount Parnassus and was the principal seat of the worship of Apollo and Dionysus, besides being the scene of the Pythian Games. The oracular responses were given by priestesses, who received inspiration by utterances from the Cynthian spring arising from the Cynthian. On the left side of the Sacred Way below stood the treasuries of the various Greek cities.



ACROPOLIS OF THE ANCIENT CITY OF MYCENAE IN THE PELOPONNESE

Centre of the wonderful Mycenae civilization, the former capital of an Achaean kingdom and the residence and burial-place of Agamemnon, Mycenae had fallen from its former greatness when it was destroyed by the Argives in 468 B.C. On the Acropolis the remains of a royal palace have been discovered, and several rock hewn graves containing a number of gold and silver ornaments.

a great health measure striking the shrewdest blow at the malaria which is the curse of all this country.

Lakes too abound in modern Greece—Thonia in the Peloponnese Agrinion in Aetarnania and besides all the remarkable lakes of northern Greece the large body of water in Boeotia known as Copais once covering some 54,000 acres. But Copais has been for long the centre of a remarkable enterprise the deliberate and sustained effort to reclaim a great stretch of the land covered by this lake.

This enterprise has been carried on by a settlement of British engineers and gives employment to a large population of Greeks. The land thus reclaimed has proved most fertile and is steadily adding to the prosperity of Greece. Similar enterprises have already been contracted for by British firms in other parts of the peninsula but have always been held up by war and unrest. The loan contemplated by the League of Nations may now make possible these large undertakings which contain the seed of great wealth for Greece.

Local Diversities of Climate

Climatically Greece is governed by the two factors of mountain and sea. Hence the climate is marked by extremes of heat and cold such as are common in mountainous districts surrounded by ocean. There are many local diversities, produced by the crossing of mountain ranges and the capricious inlets of the sea. The spring is short but sunshiny and beautiful and very rich in flowers. There is great heat in the summer when the inhabitants of Athens adopt an almost tropical manner of living taking their siesta in the day and sitting up half through the night. One curious result of this great heat in the summer is that the Greeks all take their meals very late even in the winter. Nine o'clock is quite a usual hour for dinner.

Heat and cold vary so much throughout Greece that the mean temperature

for the whole year is not higher than 62° F. The monthly mean temperature in Athens varies from 80° in July to 46° in January. The rainfall is small and there is practically none in July and August. There are cloudy days but fogs and mists are unknown. Attica has some three hundred sunny days in the course of the year. There is the same contrast between the sun-bine and shade temperature in the winter as is found in Italy or the south of France.

The Sirocco and the Sea Breeze

The Greek therefore clothe well in winter to meet the possibilities of the keen northerly wind which come from the mountain. The most unpleasant wind of all in Greece is the *sirocco* or *litas* which blows at the end of the summer with the strength of a hot blast and is most perilous to health. But it must always be remembered that the climate is tempered by cool sea breezes for nowhere at any part of the country are you far from the sea.

In the matter of vegetation the typical tree of the Greek valleys is the olive which supplies Greece with its most characteristic fruit. But Greece is rich in the vegetation also found in southern Italy which varies according to height. On the lower levels are found the laurel the myrtle the oak and the lentisk the white poplar and the plane.

Various Flowers and Bees

The cypress grows well at this level. It is the favourite funeral tree of the Greeks and is largely grown round cemeteries. A little higher up—from 1,500 to 3,500 feet—grow the trees of the more temperate parts of Europe—the oak the chestnut the pine and the elm. Above that level as in Switzerland are found chiefly the beech and the pine.

The most characteristic of the Greek spring flowers is the anemone which in every kind of colour covers the hill-sides during April and May. The historic asphodel has a great reputation and a beautiful name but its flower is by no



Underwood

THEATRE AND RUINS OF THE TEMPLE OF AESCULAPIUS AT EPIDAUROS

Epidauros was famous for its temple of Aesculapius, the god of healing, and was visited by the sick from all parts of Greece. The theatre, from the perfect harmony of all its parts and the fame of its architect, Polycleitus, is considered one of the most interesting remains of antiquity in Greece. It was capable of containing 16,000 spectators and had a diameter of about 126 yards.

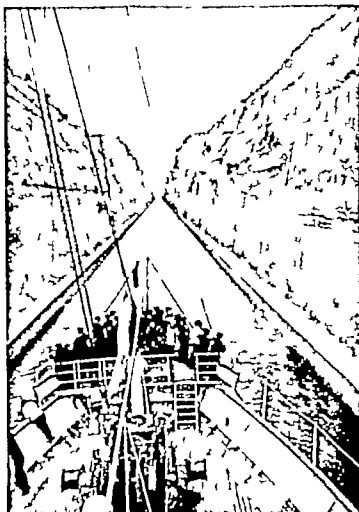
means pleasing to the Western eye.

When the heats of summer come on the flowers disappear and Greece in the months of July and August is singularly bare of colouring except in the blue of its distances and the scarlets of its sunsets.

Of recent years there have been great efforts to increase the forest area and now nearly one fifth of the total area of the mainland is afforested. But the trouble is that the Greek goat—a most popular animal with the peasantry—is extremely destructive of the new shoots and destroys the young shrubs as soon as they are planted. It is hoped however that in the course of time modern Greece may become as rich in vegetation and forestry as the Greece of the ancient world.

A great variety of fauna is to be found in the higher mountains of the Pindus range. Hares and rabbits are very abundant and foxes are plentiful. Badgers, martens and weasels flourish all over the country and polecats in the forests. Chamois are numerous in the mountains and boars in the wooded districts. There are still wolves and bears in remote parts. I am told that hares and rabbits are rarely found in the same district. Some of the Greek islands have hares and others rabbits but rarely both. On Andros for instance the hares live in the northern part of the island and rabbits in the southern part.

Greece possesses a great many birds, most of them migratory. Among the greater birds are still found those



CORINTH CANAL BEVERING GREECE IN TWAIN

Opened in 1891 the canal cut mostly through solid rock, is four miles long, 26 feet deep and 70 feet wide, and connects the Gulfs of Corinth and Argolis, shortening the voyage from the Ionian Sea to the port of Athens by 202 miles.

glorious and beautiful creatures, the imperial eagle and the golden eagle. The yellow vulture and the falcon are common. But the most characteristic bird of Greece is the historic owl of Athena, a species of small owl still found everywhere throughout the country. Greece abounds in wild birds common in many parts of England—wood pigeons, wild geese, ducks, partridges, snipe and widgeon. These small wild fowl provide admirable shooting especially in Macedonia. Storks are to be seen in great numbers along the plain of the Vardar river. Unlike Ireland Greece has still some snakes, although few of them are dangerous.

The surrounding seas contain a great variety of fish, which provide a living for a large fishing community. The dolphin, the favourite of the ancient Greeks, is still common in the Aegean Sea, and even whales are occasionally seen.

Gradual Spread of Cultivation

The principal feature in the economic development of modern Greece has been the gradual spread of agricultural cultivation over a singularly bare and arid country. The greater part of the surface is still outside cultivation, and is covered with a prickly bush called *phrygana*, which provides little more than a bare pasture for sheep and goats. But the cultivable area has been steadily extended, and Greece now produces not only olives but also oranges, lemons, dates, almonds, pomegranates and figs. At one time the mulberry tree was extensively cultivated, and silk culture used to be a favourite occupation of the medieval Greeks, especially in Anatolia. It is still a large industry and one sees many "orchards" of mulberry trees. But during the last century there has taken place a most remarkable expansion of currant-growing, bringing much wealth to the small proprietors. Currants are grown chiefly along the sea-coast, and especially along the shores of the Gulf of Corinth, the coast of the western Peloponnese, and on the islands of Cephalonia, or Levkas, and Zante. Almost the whole currant imports of western Europe come from Greece and Asia Minor, and it is only of recent years that Australia has begun to compete.

Tobacco for "Egyptian" Cigarettes

Another main crop of Greece is tobacco, which is grown over a wide area. The cigarettes known elsewhere as Turkish and Egyptian are mainly made of Greek tobacco. There is in Greece an immense competition in qualities of tobacco and a high skill in tobacco curing. The best brands come from the districts of Lamia, Agrinion, Xanthi and Kavala.

Greece produces a great variety of small grapes, including the "Roditis"

and the "Moschato" (the muscatel grape), besides a white seedless grape familiar to us as the sultana, which provides an important element in cakes and puddings.

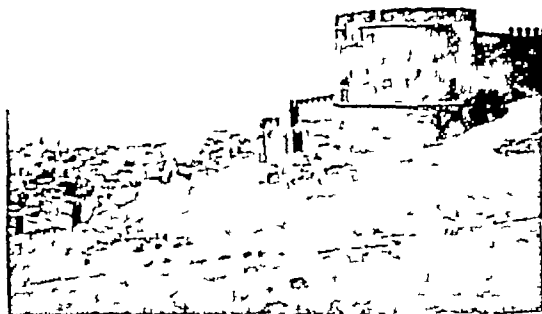
In addition to these crops, large quantities of peaches, apricots, pears and cherries are grown throughout southern Greece.

Unhappily for her people, Greece is at present incapable of producing sufficient staple food-products for her population. Maize and barley are extensively cultivated, but there is always a grave deficiency of wheat, and the consequent shortage of flour exposes Greece to the chronic possibility of blockade by any Western power that feels inclined to try that method of coercion. This weakness has played an important part in the history of modern Greece, for she was often blockaded at critical moments during the nineteenth century, both by France and by England. It has also often placed her foreign policy at the mercy of the Great Powers of Europe and is a grave danger to her liberties.

Famed Marbles of Pentelicus

In the matter of minerals, Greece has iron at Laurium and Larimna. Mining is also carried on at Larimna for lead, zinc and silver ore. But the unique wealth of Greece now, as in the ancient days, is her marble. The Attic quarries of Mount Pentelicus, which produced the material for the splendid ancient buildings of Athens erected by Pericles, are still far from exhausted, and many men are still employed in quarrying along the slopes of that mountain. The Pentelican is a singularly pure and beautiful marble admirably suited for statuary and public buildings. Marble is also still quarried on several of the islands, especially Paros, famed for its lovely "Parian."

Greece suffers from a complete absence of coal, all of which has to be imported. This defect has seriously retarded manufacturing development, and the result is that Greece as a whole still holds a low

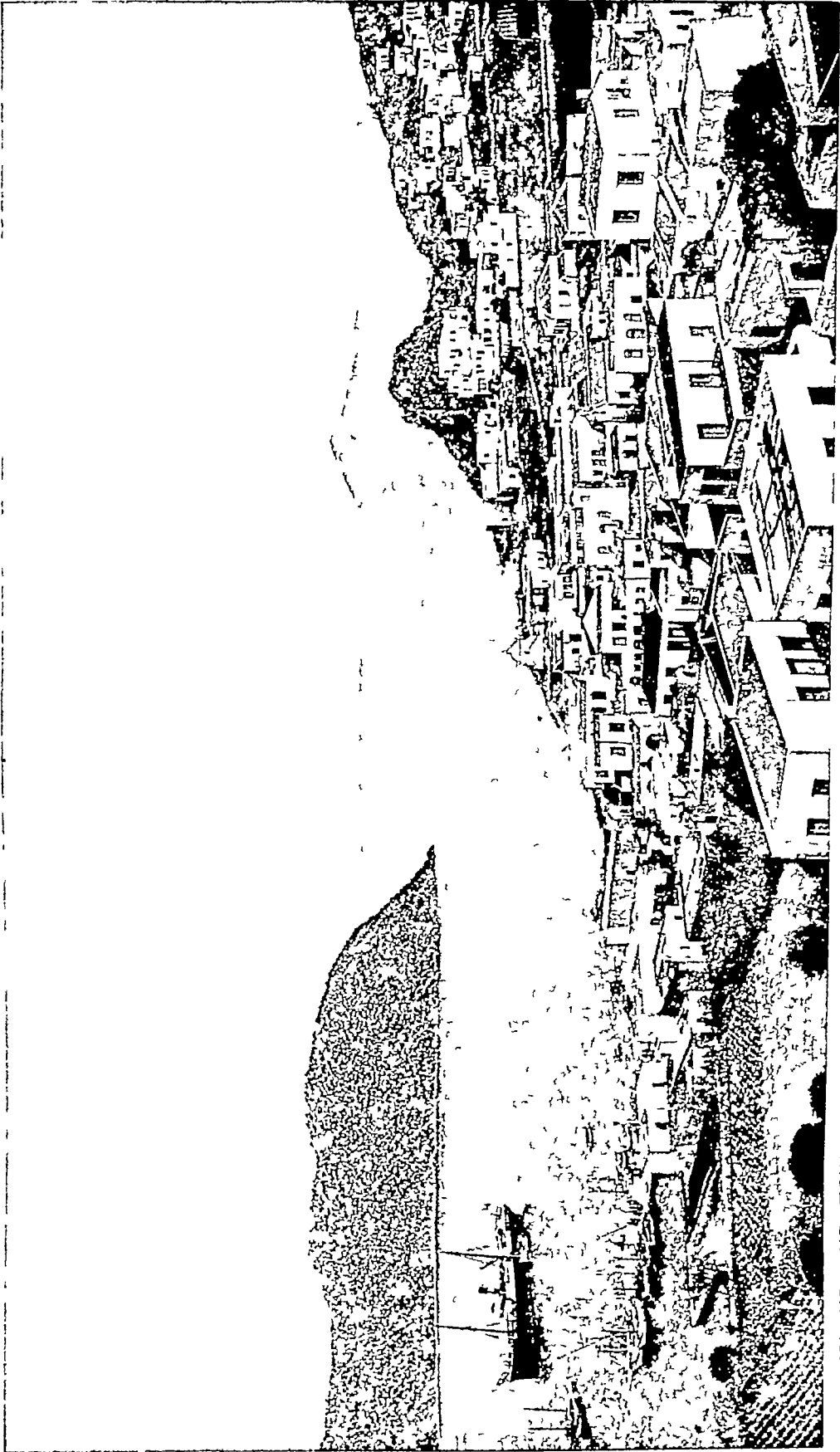


VIENNA AND GULF OF SALONICA FROM THE OLD CITY WALLS

[illegible]

BALONICA, THE CHIEF AEGEAN SEAPORT OF THE BALKAN PENINSULA

See 11 description of the new harbor which is opened. It is not a double harbor but a single one. The principal part being grain, hides, cattle and sheep merchandise, wool, and the imports of all kinds of goods, sugar, rice and alcohol. It sometimes include cotton, molasses, soap, oil and iron found in



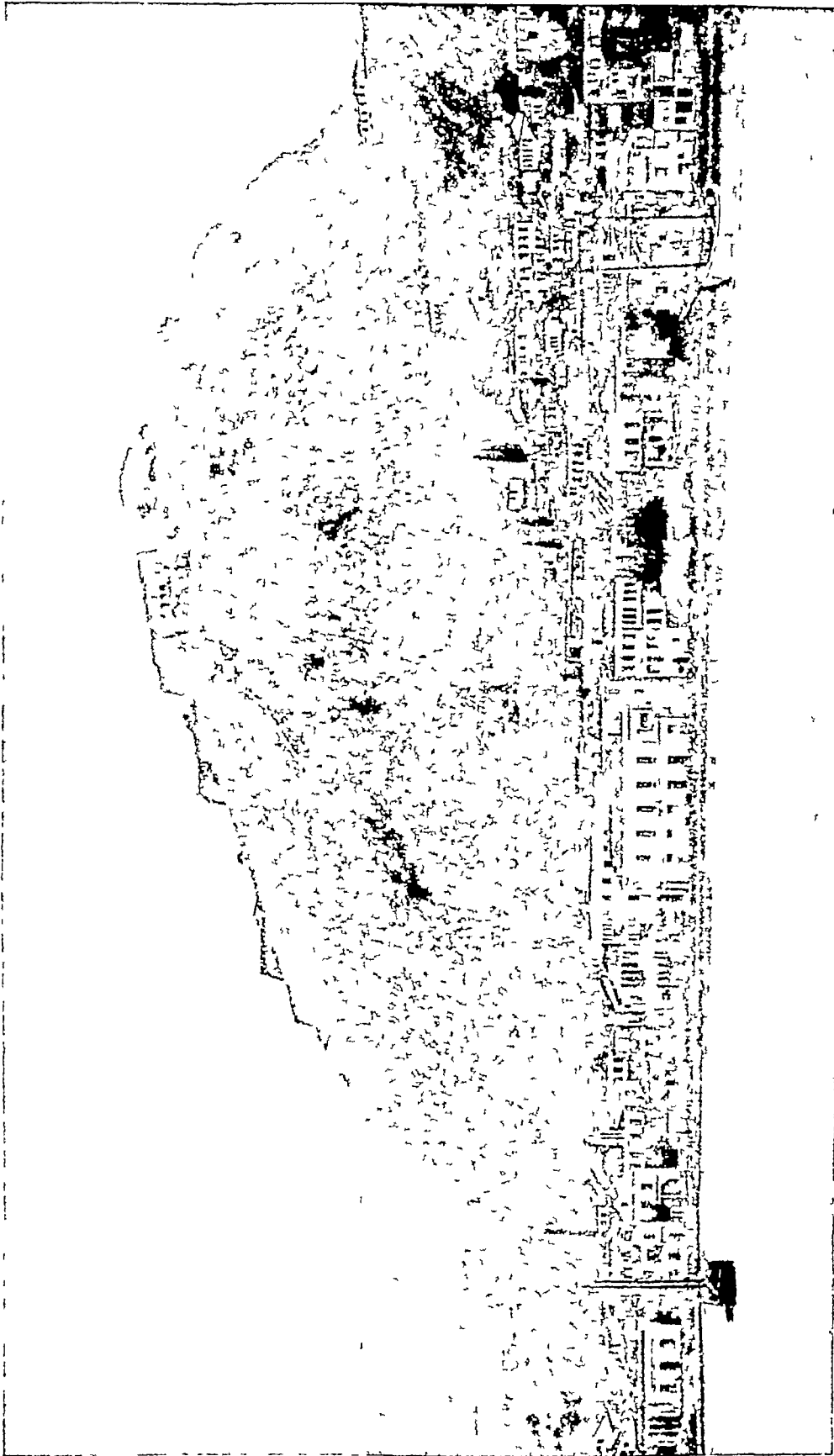
ISLAND AND TOWN OF PATMOS WITH ITS WHITE HOUSES CLIMBING INLAND FROM THE HARBOUR SHORE

Patmos, one of the islands of the Sporades lying off the coast of Anatolia, is famous as the place of banishment of S. John. The Monastery of S. John crowns the summit of a high hill outside the town, and is the most conspicuous building on the island, from its roof is a striking panoramic view which is supposed to have suggested some of the imagery of the Revelation of S. John. The island is very barren, sponge fishing being the only noteworthy industry and a large number of the inhabitants cross to the mainland in order to work as labourers.



VOLO RESTING AT THE FOOT OF MOUNT PELION AT THE EAST OF THE GULF OF PELION

VOLO RESTING AT THE FOOT OF MOUNT PELION AT THE EAST OF THE GULF OF PELION



INACCESSIBLE FORTRESS OF PALAMIDI TOWERING HIGH ABOVE THE LITTLE PORT OF NAUPLIA

Nauplia lies on a peninsula on the north eastern side of the gulf of the same name, and was the capital of Greece from 1828 to 1834, but is now a second rate town, exporting tobacco, currants, honey, cheese and sponges. The fortress of Palamidi stands on the summit of a precipitous rock and was built by the Venetians and Turks, access is obtained by means of steps hewed out of the rock by the Venetians. In the channel, about 500 yards from the shore is the island castle of Bourzi now used as a prison for the public executioner, who is always a reprieved criminal and needs protection from the embittered relatives of his victims

B N A

place among the manufacturing peoples. There are, however, at but one hundred factories around Athens and the Piræus — flour and cotton mill factories for cloth and silk spinning. But although the Greek of the middle class has shown himself an expert merchant and manufacturer both in Egypt and in England he has not much scope in his own country. That is perhaps the reason why so many of them migrate. The greater part of the Mediterranean bank in Asia is in Greek hands and since their manipulation the Greek people have developed a small professional class of a very high standard.

Land Population and the Refugees

But the history of Greece has been marked by the same social defect as that of the history of the Jew. Oppression has driven them from the primary to the secondary occupation. The modern Greek is a better middleman than manual worker. They make good bankers and merchants. But their professional class is small.

The habit of changing the civil service together with the government has produced deplorable results owing to the frequent changes of government. It is to be hoped that Greece will establish a permanent civil service.

Greece is still underpopulated in proportion to her area. It is possible indeed that after great miseries the influx of the refugees from Asia Minor may prove a blessing in disguise. For when the weakest have died off the stronger survivors of that population may profitably supplement the energies of Greece. The exodus of the Mahomedan population going on under the Treaty of Lausanne will inevitably intensify the racial characteristics of the Greeks. The last traces of Moslem rule are departing, and before the middle of this century it is probable that the population of Greece will be purely Christian and Greek.

The communications of Greece and the islands are naturally very varied and include roads, railways and ships. In

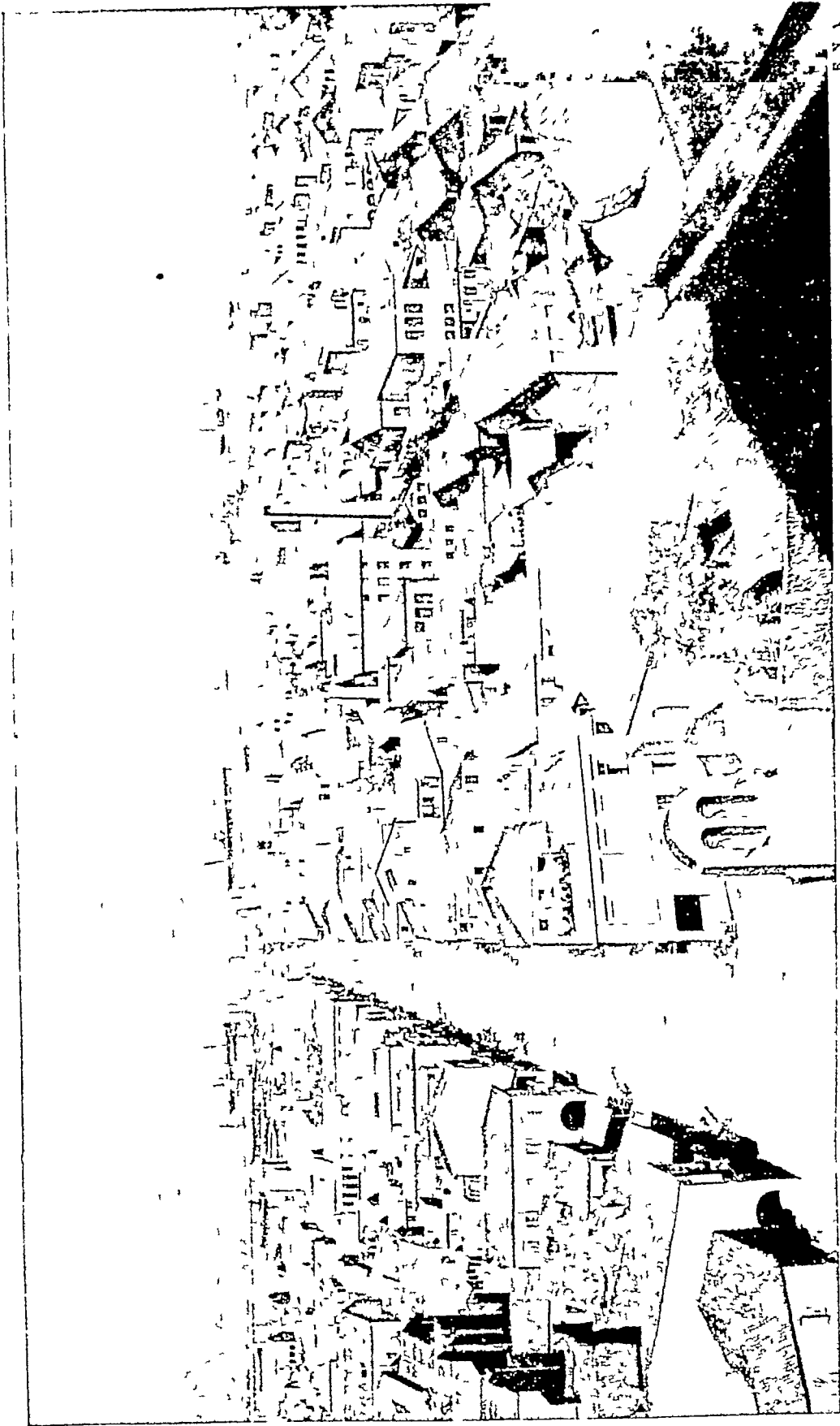
respect of railways Greece is still gravely under-supplied. Through communication with western Europe has only been completed since the close of the Balkan Wars because it was always part of the policy of Turkey to keep Greece separated from the rest of Europe.

Routes to Greece by Land and Sea

When I first visited Greece in 1907 — there was no direct railway communication with Europe and there was no approach to Athens except by sea. Since then the railway communication by Belgrad, Nish and Salonica has been completed and there is a through carriage on the Orient Express three times a week although the travelling across the Balkan is still somewhat uncertain. The more attractive approach to Greece is still by sea and I would strongly recommend the western traveller to use the port by way of Venice down the Adriatic on the Triestino-Lloyd boats stopping at Brindisi and crossing the Strait of Otranto to Corfu. Thence it is a most pleasant and smooth passage by way of the Gulf of Corinth and the Corinth Canal to the Piræus. The sea approach by way of Salamis is one of the most entrancing sea voyages in the western world.

Shortage of Railways

In Greece herself there is a convenient railway running from Athens along the northern coast of the Peloponnese to Patras by way of Megara and Corinth. That line continues round the western coast of the Peloponnese to Pyrgos where one can visit the ruins of Olympia and thence into the interior to Tripolis (Tripolitza) which was the capital of the Peloponnese during the War of Independence. It also continues south to Kalamata (Kalamata). But there is still no railway to the town of Sparta or into the south-eastern districts of the Peloponnese. The only other railway district in Greece is in Thessaly where there is a line running from west to east across the main route between Athens and Salonica. It is sincerely



ONE OF THE BROAD, ARCADED STREETS OF PATRAS RUNNING DOWN TO THE HARBOUR ON THE GULF OF PATRAS
Situating on the slope of a hill overlooking the Gulf of Patras, Patras is the largest town in the Peloponnese, the fourth largest in Greece, and in commercial importance it ranks next to Piraeus and Salonica. It is the centre of the currant trade and of a large agricultural district; there are tobacco factories and flour and saw mills in the town. The principal exports are currants (more than half the total export), sultanas, wine, hides, tobacco and olive oil; the imports include linen goods, machinery and coal. The town, which had suffered from earthquakes, has been practically rebuilt since Greece became independent.



Harold Spender

CHURCH AND CONVENT OF DAPHNE ON THE ROAD TO ELEUSIS

Standing on the site of the temple of Apollo the domed church contains some beautiful Byzantine mosaics dating from the twelfth century and under the vault are the obelisks of one of which bears a coat of arms with Grouse de la Roche being the emblem of the family of the de la Roche. The convent is the burial place of the last kings of the family of the de la Roche.

to be hoped that Greece will now take advantage of her peace to add to her railways and also to her hotels.

The lack of railways is not made up by a good supply of other means of transport. At the present moment the roads are very poor owing to long neglect during the prolonged period of war. I shall not easily forget a motor ride between Athens and Marathon in 1913. The car seemed to descend into deep pits not unlike the shell holes in the French roads during the Great War. The roads are a little better farther north and there is now a development of motoring in Epirus and Albania which

may soon open up those remote districts to the tourists of Europe. But Greece requires to spend a great deal of money on her roads before they can come up to the standard of those of western Europe.

Greece has an extensive steamship service with all parts of the world while smaller boats ply between the islands.

In regard to electric communication with the inner and outer world there is a fair telephone system in Athens and Salonica. There is also a fair telegraph service through the country and between the islands while the Eastern Telegraph Company maintains a cable service with the islands and with the principal

capitals of the world. There is also a Marconi wireless station at Athens whence messages can be sent by way of Italy to all parts.

British Trade Competition

The external trade of Greece, it will be gathered, consists mainly of an exchange between the export of currants, tobacco, wine and olive oil and the import of cereals and textiles. The chief British trade with Greece is in textiles, which are exchanged for currants. It is to be considered that if this trade be transferred by way of Imperial Preference to Australia, Great Britain will have to look to losing the exports of textiles. At present the chief danger is that Italy, which is rapidly developing her manufacture of textiles, may take from Great Britain the markets of Greece and of Egypt.

Within the area of Greece itself the chief trade is between town and country. Greece is still more than half an agricultural country, and there is great room for development. The most forward element in the home policy of M. Venizelos was land reform. He made a serious effort to break up the large estates which impede the productive power in the north of Greece. But the result was that he drew upon him the hostility of the most powerful class in northern Greece—the great absentee landlords—and as he was already opposed by the small peasant proprietors of the Peloponnese, he fell into the unpleasant political position of being between two fires, and it was partly over his land policy that he was defeated in his own country.

Primitive Rural Conditions

The rural conditions of Greece are very much the same as those of southern Italy. The people are amiable and hospitable, except in times of trouble, when they are suspicious and nervous. Their food is primitive. There is generally a monastery within call where the traveller is sumptuously entertained, but visitors must be warned that the

wine, though pure and good, is generally mixed with resin, which gives it a particularly harsh taste. The cheese is bitter, and is eaten with sugar. The bread is black, and the milk is drawn from goats, as the peasantry possess few cows. There are few large towns in Greece, and Athens stands above all others in aspect and civilization.

Salonica was half destroyed by fire in 1917, and is only now gradually rising from its ashes. Of late years both Athens and Salonica have been swamped with refugees coming from Asia Minor and have lost much of their amenities, both in health conditions and sanitation. Diseases were spread by refugees, though typhus was stamped out by the energetic medical service brought to bear. The houses in Greece are comfortable and airy—admirably adapted to the weather conditions. In Macedonia the traveller suffers much from mosquitoes, which are dangerous because they carry malaria. It is wise to include mosquito nets in one's luggage on a summer visit.

Links 'twixt Past and Present

The modern Greek is a tall, slim-built man, with a keen physiognomy and possessed of much mental alertness. He is a great talker, fond of open-air café life, and generally a keen politician. Undoubtedly one of the vexations of Greece is the turbulent interest in politics which pervades all classes. The Greeks are a sea people, and sea people are proverbially passionate for freedom. Plato himself described the craze for liberty that characterised the Greek sailor in ancient days, in a famous passage in 'Eolthen.' Kingslake describes the discussions on board a Greek ship caught in a storm. The town populations of modern Greece also show the same passion for faction and change as the town populations of ancient Greece, and the direct inheritance of these political and social traditions seems to be the best reply to those who deny the racial connexion between the modern Greeks and the ancient.



ON THE QUAY AT MITYLENE THE CHIEF TOWN OF THE ISLAND

Mitylene, an ancient Dorian town, is a land in the Aegean Sea, about midway between Smyrna and the Dardanelles. The town of Mitylene is on the east side of the island, backed by a screen of hills covered with pine trees. Not far from the town are the ruins of the Temple of Apollo, and some of the remains of the Temple of Apollo may be seen in the gardens surrounding the town.



DRAWING WATER FROM AN OLD TURKISH WELL IN A STREET OF MITYLENE

Formerly called by the Turks the Garden of the Ottoman Empire, the island produces wine, oil, figs, oranges and lemons for export, while timber and pitch are obtained from the pine forests that cover the mountains. There are several mineral springs and remains of ancient baths, the waters of which are said to be good for rheumatism and cutaneous diseases.

No traveller, indeed, can doubt that the Greek of the islands is of a purer stock than the Greek of the mainland. The physiognomy of the islander recalls the ancient statues, and I have seen on the island of Milo (Melos) Greek girls not unworthy of their descent from the Venus of Milo. The great invasions of Greece which took place after the Roman occupation, the invasions by the Slavs, the Turks and the Venetians, have undoubtedly left their mark on the race, and like all modern nations of Europe, the Greeks are a mixed people. But they are no more mixed than the ordinary inhabitant of England, who has in his blood the Norman, the Dutch, and even the Jewish strain, as well as the Anglo-Saxon and the British.

Taken as a whole, the modern Greek has the right to claim the history of ancient Greece as part of his inheritance, and the strange thing is that his language is less changed from that of ancient Greece than the languages of Italy, France or England are from those of their forerunners. An acquaintance with ancient Greek makes it possible to read the Greek papers and listen to Greek speeches with comparative ease, though the written seems less changed than the spoken word.

Greece is surrounded with great possibilities and great perils. Badly guided, she may crash into even greater disaster than she has yet experienced. For her enemies are very near, and her

friends are far away. The downfall of Russia and Germany left her with no friends in central and eastern Europe. M. Venizelos always saw clearly that her future rests entirely upon the goodwill of England and France. He also wished to make friends with Italy. There undoubtedly he was wise. For Greece is, as yet, too small to do without friends. Her life is still stirred and agonised by the sufferings of the Greek population under Turkish rule. But the transference of populations, which with no little difficulty was effected by the Lausanne Treaty, will diminish that burden.

More than ever before, Greece will possess her own population within her own borders. That will give her a great opportunity of developing her large commercial possibilities by means of the education and training of her people. For, thanks to her climate, Greece possesses much potential wealth. Her agricultural produce can be immensely increased. She might become self-supporting. Her currant crop gives her a valuable asset for foreign trade. Her well known and undoubted skill in banking and commerce makes her necessary to Europe's complicated financial systems, and if she can only acquire the prestige of a peaceful policy—both at home and abroad—it is, perhaps, not too much to hope that she will soon regain her high place among the European peoples.

GREECE GEOGRAPHICAL SUMMARY

Natural Division In essence, Greece is merely the coastal fringe of South Balkania, a piece of a fractured plateau with a drowned coast-line, many estuaries, many islands and few plains. Physically a land carved out when the Mediterranean Sea came into existence in its present form, its unity is due entirely to the sea.

Climate and Vegetation Mediterranean rainy winters and hot, dry summers are characteristic of the lowlands, the heights are sometimes under perpetual snow. Forest-clad slopes without natural grasslands are just as typically Mediterranean, with the cultivated olives, and grapes, which yield a large proportion of the world's currants and sultanas. Greek

tobacco competes in the cigarette market with that of Virginia.

Communications The sea is the great highway. The Corinth Canal has not been a great success. The railways, few in number, supplement the sea service.

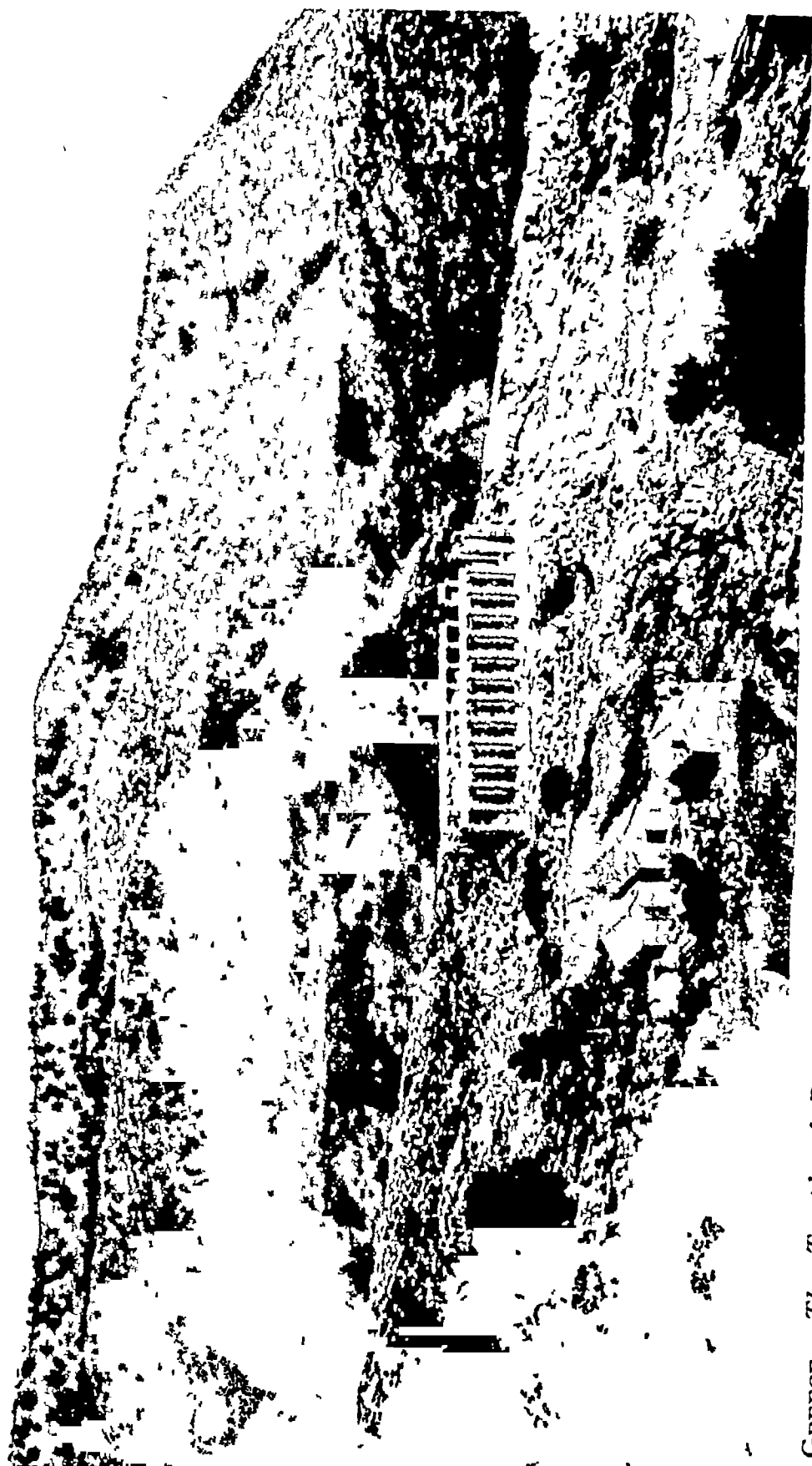
Outlook Greece makes little contribution to the major needs of the world except in the personal services, particularly throughout the Levant, of her sons. The fragmented nature of the peninsulas and islands compel trading in small quantities, and the Greek is naturally an agent, a middleman, a pedlar in the byways of the Middle East. The land is not the cause of unity, and Greece has little hope of solidarity therefrom.



Harold Spradley

GREECE. *On the banks of the Inachus close to Argos, with its fringe of fruit trees and cypresses and host of historic associations*

Photos to pages 2053-2060 *Belmonte*

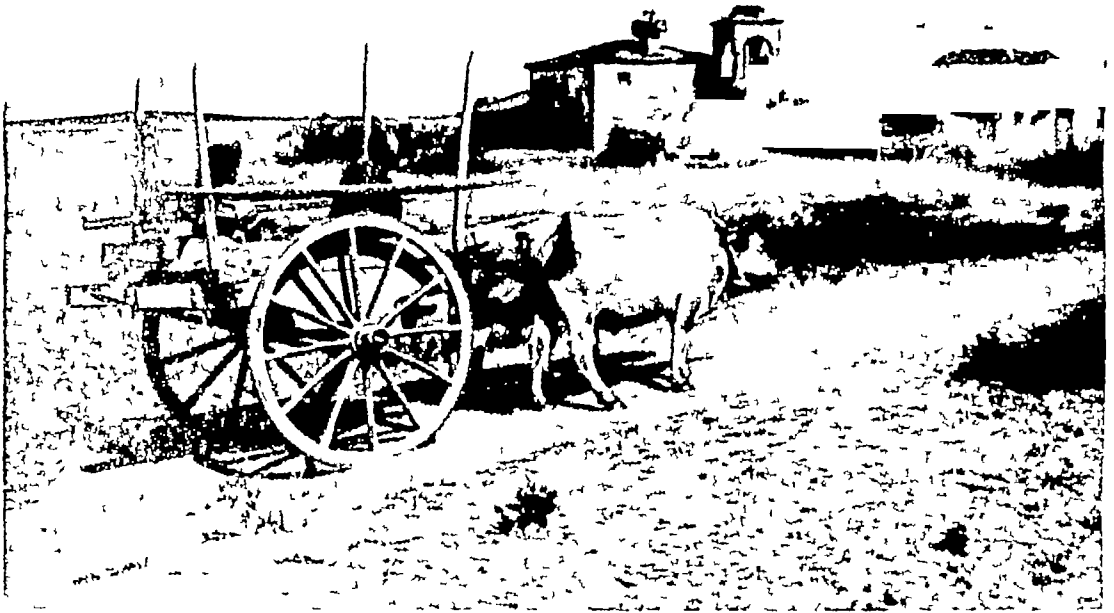


GRECE The Temple of Bassae in Arcadia, where Apollo was worshipped as the god of healing, amid solitary oaks and scattered rocks, forms a strange and unexpected picture in these wild and barren mountains

E N A



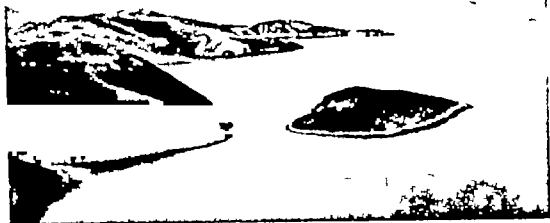
GREECE. At the foot of the scrub-covered flanks of Mount Oeta the plain of Lamin stretches away into the dim blue distance affording a contrast to the rugged beauty of the surrounding mountain ranges



The traveller in Greece becomes familiar with dilapidated farm-houses on which storks build their nests and crude carts drawn by oxen



GREECE. The slender minaret challenges the towering cypress trees that overshadow the tiny mosque at the pretty Turkish village of Baba



Despite its sterile appearance the Isle of Ithaca is not without scenes of softer character, where woods of olive trees fringe the shore



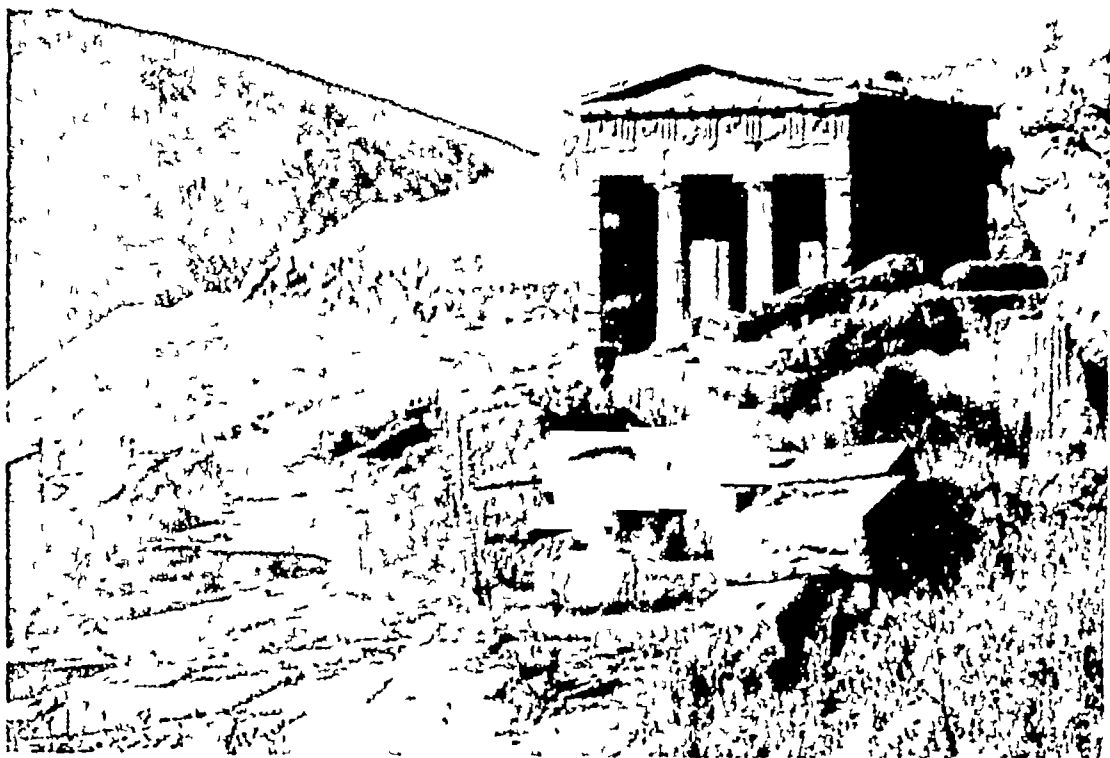
GREECE Quaint ferry half boat half barge that plies across the Alpheus river, where it skirts the wooded slopes about Olympia



GRIFFIN The track through the Langada Gorge leads up and down hill, sometimes half-way up the steep, forbidding limestone cliffs and sometimes in the narrow bottom of the valley with its occasional magnificent plane trees



GREECE. Framing down upon the white building of the Pinnigia the Larisa of Irgos a massive castellated fortress of Byzantine and Frank construction dominates the town of Irgos and the plain of Irgolis



Amid the wonderful ruins of Delphi is the Doric building known as the Treasury of the Athenians, with its sculptured metopes



GREECE. Built in a huge vaulted cave, the monastery of Megaspelaion seems to be clinging precariously to the face of a lofty cliff

The Great Lone Island of the Arctic Seas

by A. C. Seward

Author of "A Summer in Greenland"

TO John Davis in 1585 Greenland appeared to be a land of desolation to most of us it connotes icy mountains and barrenness. It has little claim to the title of a green land. Laik the Red who was the first European to set foot in the country in the year 983, on returning to Iceland, spoke of the recently discovered land to the west as "Greenland" in the hope that the comely name would induce his countrymen to sail with him on a colonising expedition.

Of the thirty five ships which sailed from Iceland in 986 fourteen reached the south-west coast and there the Norsemen established themselves with their sheep and cattle. In the middle of the eleventh century the first bishop was appointed and many churches were built. In 1616 the Republic of Greenland voluntarily became part of the powerful Norwegian kingdom which at that time included the Isle of Man, the Faroe Islands and the Orkney and Shetland Islands. In course of time communication between the colony and the mother country became more irregular and finally, owing to civil disturbances and epidemics in Scandinavia entirely ceased.

Second Colonisation by the Danes

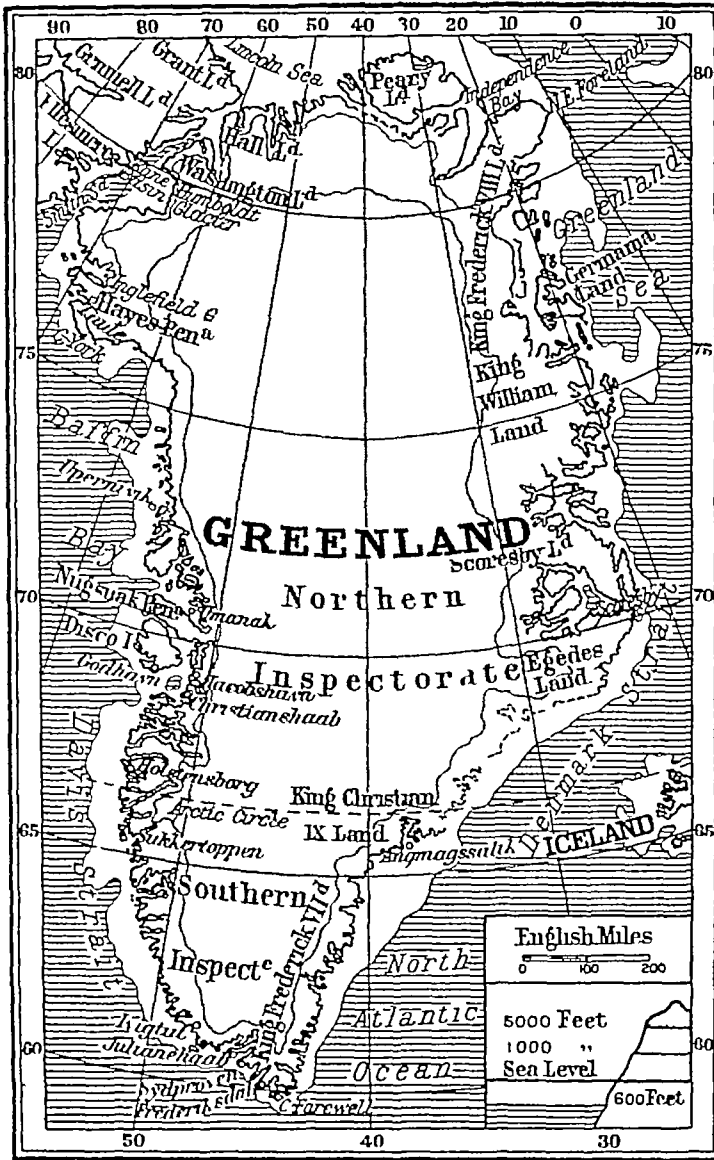
In 1721 the Norwegian clergyman Hans Egede a Danish subject, sailed to Greenland in the hope of discovering some of the descendants of the neglected Norse colonists. Finding only their graves he devoted himself with conspicuous success for the next fifteen years to re-colonisation and the welfare of the Eskimos. In July 1921 the King and Queen of Denmark visited the west coast and took part in the celebrations

of the bicentenary of the re-colonisation of the land by Hans Egede. The earlier Norse colonists had eventually come into conflict with the native inhabitants who in part at least were probably responsible for their extermination. As a result of the second colonisation trade relations were established between settlements on the west coast and Denmark. During the last few years discussions have taken place between Denmark and Norway with regard to their respective rights over some of the uninhabited parts of the east coast. The rest of Greenland is recognized as a Danish colony.

Greenland's Mountainous Plateau

Greenland is a well-defined geographical unit. The expeditions of Admiral Peary of the U.S. Navy and the subsequent journeys of Knud Rasmussen and other Danish explorers demonstrated its insularity and provided data for mapping the northern coast-line. The island is separated by a narrow strait on the north-western edge from Grant Land, Crinnell Land and Ellesmere Land on the confines of the Canadian Arctic archipelago. In its fauna and flora as also in its geological structure Greenland is related both to America and Europe. It is a mountainous plateau rising along the coast-line to an average height of two to three thousand feet above the sea, though in some parts the mountains reach a much greater altitude.

In shape it resembles a shoe lying on its side—the heel with Cape York at the inner corner projecting on the north-west coast towards the Canadian archipelago and the toe, represented by Cape Farewell (on the latitude of



THE ISLAND OF THE VAST ICE-CAP

Christiania in Norway) pointing south. The total length is nearly 1,700 miles, the average breadth about 600 miles, the area is four times that of France. Long and tortuous fjords penetrate deeply into the edge of the land. Over nearly 90 per cent of the whole lies a continuous shield-shaped mass of ice of unknown depth, the Greenland ice-sheet.

Since 1888, when Nansen first crossed the inland ice from the east coast in the southern part of the island, other explorers have made traverses in the far north and across the middle of the country. This great enveloping sheet

of eternal ice forces slowly-moving glaciers through the valleys and fjords to the edge of the sea, one of the largest of these rivers of ice is the Humboldt glacier on the north-west coast immediately south of Washington Land where its seaward margin has a breadth of 60 miles and forms a cliff of ice 300 feet high. When the glaciers have ploughed their way into water deep enough to buoy up the mass of ice portions are broken off as icebergs which float out to sea, some stranding on the beach not far from their birthplace, others carried by currents to the Gulf of St. Lawrence or farther south.

There are few more impressive and beautiful scenes than the view on a calm summer day off the northern coast of the Nugsuak Peninsula, a background of some of the highest mountains in Greenland rising almost perpendicularly from the water, the more distant ones dark blue and the

nearer cliffs a glistening pink, the blue sea littered with floating bergs, massive table-like blocks and pinnacled, fantastically shaped forms, shining with a dazzling whiteness and near the undercut base shading into a brilliant blue-green, or, it may be, the higher peaks of the ice coloured a rose-pink by the slanting rays of the sun. The higher icebergs rise to over one hundred feet above the surface of the water and extend about eight times as far below the sea. From time to time the stillness of the night, a night which is as light as day, is suddenly broken by the thunderous booming of a breaking

berg as the melting of the ice disturbs the equilibrium and the riven mass slowly heaves to and fro until it finally comes to rest in a new position.

Except in the more northerly part the western coast is almost free from ice in the summer. As the frozen sea melts and currents break up the fissured surface leaving occasional patches still adhering to the shore until late in the season the hills and valleys near the coast are gradually laid bare and as soon as the temperature rises above freezing point the winter sleep is suddenly broken and there follows the annual miracle of an earth

reclad with flowers. On some parts of the west coast the ice-free belt is over 100 miles in breadth but on the east coast the inland ice comes closer to the sea and the meeting of opposing currents causes an accumulation of floating ice which often forms an effective barrier to ships endeavouring to make land.

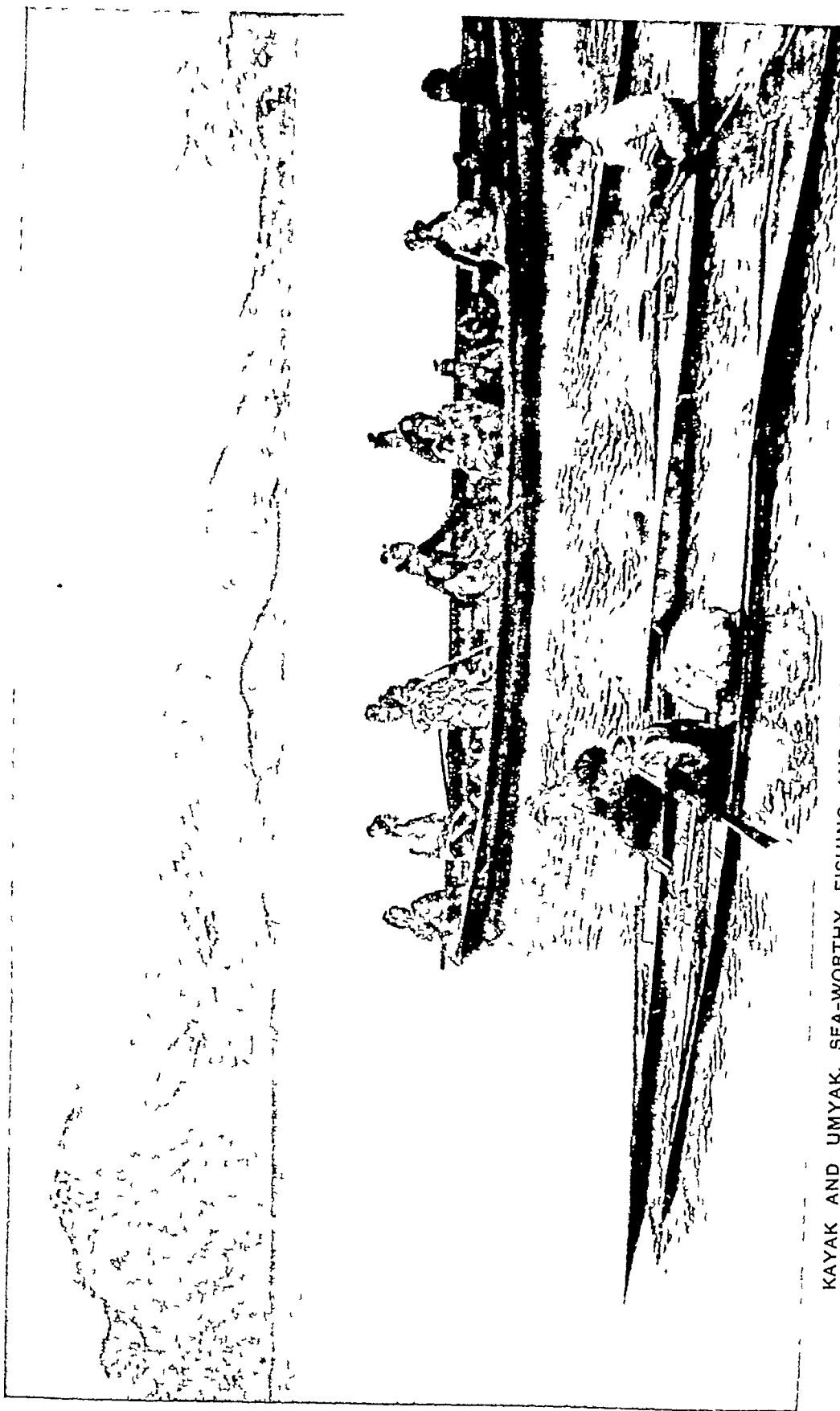
With the exception of the district of Angmagssalik, slightly north of lat 65° N there are no settlements on the more inhospitable eastern shore. It is a remarkable fact that on the deeply indented north coast overlooking the Polar ocean from Peary Land to



THE MIRACLE OF EARTH RE-CLAD IN ARCTIC GREENLAND

Cambridge University Press

Usually associated in the imagination with icy mountains and sunless clime, it is surprising to learn that in summer Greenland is a land of sunshine and that flowers and plants, including orchids, dandelions and ferns, seen above, flourish abundantly in the coastal regions. These scattered colonies of flowering plants vividly signify the triumph of life over adverse forces of nature.



KAYAK AND UMYAK, SEA-WORTHY FISHING AND TRAVELLING BOATS OF THE ESKIMO POPULATION

Danish Expedition

To the Greenlanders the kayak, a long, narrow fishing and hunting boat for one person, is an inseparable possession, and its manipulation is reckoned as the preliminary step towards efficiency in obtaining the necessities of life. It is some seventeen feet in length and nearly two feet in width and is propelled by a double paddle. As ancient a type of craft as the kayak is the umyak, usually called the woman's boat, for its crew in former times consisted only of women. Flat bottomed, between 30 and 40 feet long, with skin covered wooden frame, it can carry fairly heavy luggage and is used chiefly for long journeys.



WEATHERED ROCK WALLS ON THE DESOLATE SOUTH COAST OF THE STORM-TOSSED VAIGAT STRAIT

The Vaigat Strait separates Disco Island from the northern shore of the island of Svalbard. The walls of the strait are composed of a variety of rocks, including granite, gneiss, and schist. The rocks are heavily weathered, and the strait is known for its rough and stormy waters. The photograph captures the dramatic and desolate beauty of this northern coastal environment.

Washington Land on the north-west side, there is a broad region relatively free from ice in the summer inhabited by herds of musk oxen and decorated with the yellow poppy and other Arctic flowers

Long Nights of Sunshine

Though the southern portion of Greenland extends a considerable distance south of the Arctic Circle, while the northern shore reaches lat 83° N, the vast sheet of ice over the whole of the interior is a dominant factor in producing an Arctic climate. There are, however, striking differences between the two ends of the island. In the south the annual rainfall is about fifty inches, in the north it is only eight inches. At Cape Farewell the longest period of continuous sunlight is 18 hours, at Smith Sound in the north the sun is above the horizon for 130 days. North of Holstensborg, near the Arctic Circle, dog-drawn sledges are the only means of transport in the winter over the frozen sea and snow-covered land, while farther south the life of the native is less sharply divided by the alternating seasons. As a Greenlander says, "Up here we live two different lives, in the winter, under the lash of the north wind, in the summer under the torch of the warm sun."

Vivid Flowers amid Summer Snow

From the sea the coast presents a rugged dignified aspect, in the distance the dark wall of the main plateau is relieved by occasional gleams of white from the inland ice. A nearer view shows patches of snow and ice even in summer lying in sheltered hollows on the hillsides, rock-faces sprinkled with variously coloured lichens, the gentler slopes and boulder-strewn beaches and valleys covered with a carpet of stunted shrubs or studded with clumps of white, yellow and purple flowers which afford a striking contrast to the sombre colouring of the ground and the glistening icebergs stranded on the shore.

Observations over a series of years at a locality about half-way up the west

coast illustrate the average climatic conditions. The ground is permanently frozen at a depth of about one or two yards below the surface, and the descending roots of the willows and other plants are compelled to spread horizontally. The sun is above the horizon for 65 days, the mean annual temperature in February is approximately 36° F below freezing-point, in July it is 46° F. In London the corresponding temperatures are 10° F above freezing-point and 60° F.

Rare, Stunted Trees and Shrubs

Greenland is almost entirely a treeless land. At the southern end there are thickets of willows, birches, junipers, alders, and the American sorb reaching sometimes a height of ten feet or more, but for the most part the only representatives of trees are the dwarf birch and a few willows which even in the most favourable situations seldom attain a height of three feet. The slopes of the hills near the coast are covered with a dense growth of flowering plants, compact bushes of willows and greenish-grey or light yellow lichens. There are wide stretches of tundra, partially bare ground with patches of vegetation among the ice-worn rocks.

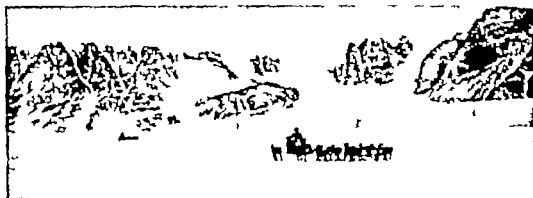
A characteristic feature of Arctic vegetation is the burst of activity as soon as the sun breathes upon the frozen mountains, in place of the succession of scenes which we associate with an Alpine or English summer, the Greenland flora is compelled to put forth a concentrated effort within the short space of about two months. There is an almost explosive development of energy expressed by a sudden display of innumerable flowers, followed in autumn by a brilliant show of crimson, yellow and orange tints before the snow covers the whole surface with a protective sheet. In the heath group one of the most abundant plants is *Cassiope tetragona*, a member of the heath family distinguished by its slender stems encased in four regular rows of scale-like leaves and pendulous yellow bells. It is a species unknown in Europe except



GREENLANDERS PREPARING SEALS FOR THE KITCHEN

Danish Express

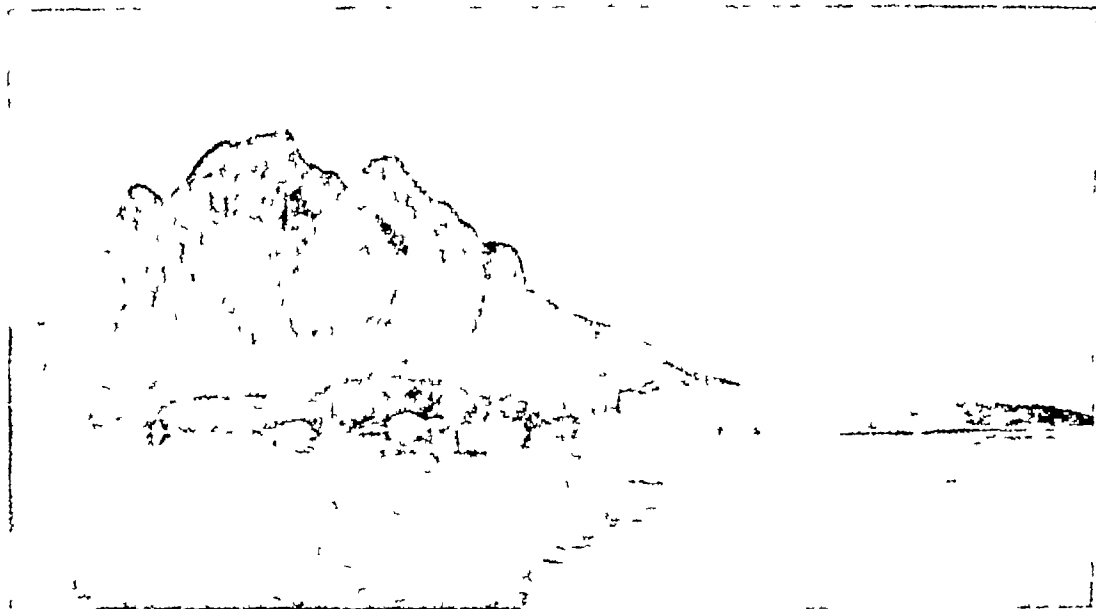
To skin and cut up the seal requires no little dexterity, and the Eskimo woman is said to be even keener in this respect than the man. She is always in the waters around Greenland and are persistently baited by the Eskimo women whom they supply with much food and clothing. When hunting what time is often placed on the kayak or sledge front to make the seal believe it is a block of ice.



Danish Express

TRAVELLING IN WINTER WITH DOG TEAMS IN ICE BOUND GREENLAND

When the frozen sea prohibits further use of the kayak, the sledge is the sole means of transport and travel for the settlement of North Greenland, and numerous dogs—only partly domesticated and almost wolf-like in appearance—are employed as draught animals. Usually eight or ten are harnessed abreast of each other to the sledge and when in progress spread out in fan-fashion in front of the driver.



Cambridge University Press

UMANAK ISLE, DETACHED BASTION OF CRYSTALLINE IGNEOUS ROCK

Off the north east coast of the Narsarsuaq Peninsula, on the jagged western shore of Greenland, this conical cliff whose shape recalls to mind the pinnacled dignity of the Matterhorn rises almost sheer from the Umanak Fjord to a height of nearly 4 000 feet. At its base among the irregularly shaped rocks which surround the towering crystalline mass lies the settlement of Umanak.



Danish Legation

PRIMITIVE FISHING AMONG GREENLAND'S RUGGED ROCKS

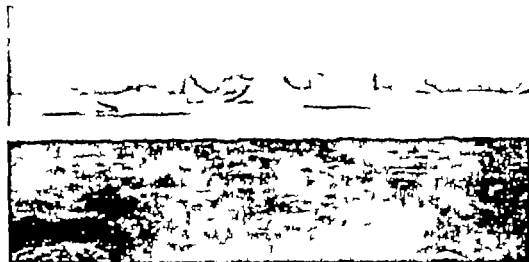
At an early age the Greenlander is initiated into the art of hunting and fishing, skins, fish, seal oil and eiderdown drawing a profitable trade. Though animals are not numerous and are represented mainly by the polar bear, reindeer and musk ox, birds are fairly plentiful, while extensive fishing grounds surround the coast, cod and halibut being the chief catch.



Georg Incekel

SUMMER LANDSCAPE ON THE COAST OF GREENLAND, SHOWING STRANDED ICEBERGS IN A SHELTERED INLET

Nearly all the large island of Greenland, which lies mainly within the Arctic Circle and is the only colonial possession of Denmark, is a mountainous plateau, composed of some of the world's oldest rocks, with an average altitude of 2,500 feet, while its highest summits approach 10,000 feet. The entire area is almost completely covered by an ice sheet, from which several glaciers move towards the shores, where they break up into icebergs and drift away to sea. That of Humboldt on the north west coast is reputed to be the largest in the world, with a rate of movement surpassing that of the glaciers of the Alps.



Antarctica (air view from)

THE GLITTERING BERG THE MARINER'S FOE. OFF DISCO ISLAND

South of the Arctic Circle, in the north of Greenland by a zigzag line, the coast is marked by a series of icebergs and reefs. The icebergs are of various sizes, from small icebergs to the great icebergs of the Atlantic. The icebergs are of various shapes, from small icebergs to the great icebergs of the Atlantic.

The greater part of the island consists of some of the old rock of the earth. Through countless ages most of the country has been dry land but from time to time partial invasion by the sea led to the deposition of sedimentary material on the submerged edge of the ancient plateau. It is from these old sands and muds of different geological

period that records have been collected of the life of former ages.

On the coast of Washington Land Paleozoic limestones are described by the Danish geologist Lauge Koch as veritable coral reefs. On Disco Island and the adjacent parts of the mainland several hundred feet of sandstone and shale with occasional seams of coal rest on the older rocks and above them



Cambridge University Press

HIGHLANDS BORDERING THE EASTERN EDGE OF UMANAK FJORD

The coast of Greenland is characterized by rugged cliffs often reaching a height of 3,000 to 4,000 feet, rising sheer from the or an 11th deep and winding fjords piercing inland for many miles. Umanak Fjord, off the west coast is fringed on its northern and western sides by some of the highest mountains in Greenland while along its western edge some of the oldest rocks are to be found.

is a succession of basaltic lavas and beds of volcanic ash. These sedimentary rocks, belonging to the cretaceous and tertiary periods, contain the remains of a luxuriant flora which clearly indicate climatic conditions as genial as those of southern Europe to-day.

Greenland is to-day what the British Isles were during the last great glacial period several thousand years ago, in earlier stages of the earth's history Greenland was a land supporting forests of planes and many other southern trees, with an undergrowth of ferns closely allied to species that are now tropical and subtropical in their distribution. By far the most important mineral in Greenland is cryolite, a sodium-aluminium fluoride which occurs at Ivigtut on the south-west coast, and has been imported for many years to Europe as a source of aluminium or for other purposes. The mine is worked by a company which pays a royalty to the Danish government. Graphite is also mined, and there are two government coal-mines on the west coast.

The main occupation of the Eskimos is hunting and fishing. At an early age boys are taught to navigate the kayak, that incomparable canoe-like boat which has played a prominent part in the fortunes of this hardy race for many generations, to use the harpoon and to handle a team of dogs. Formerly the native was dependent for his supply of wood upon the logs washed ashore after a long journey from the Siberian coast, he had no metals save a little native iron, only bone and stone with which to fashion his boats, weapons and utensils.

There are practically no roads in Greenland, in the summer communica-

tion is by boat—the kayak, the much larger umyak, or woman's boat, and the more modern motor-boat. There are no carts, no horses nor ponies. In the winter, except in the south, the dog sledge replaces the kayak. There were no telegraph stations when the writer visited Greenland in 1921, but now some are to be established. The Eskimo population is about 14,000, with the exception of Angmagssalik, on the east coast, all the settlements are on the west coast, extending to Upernivik on lat 73° N, and the still more northerly Thule, where Knud Rasmussen established a trading station.

Many of the Greenland Eskimos show obvious signs of interbreeding with Europeans, it is in the purer-bred northern type from the Cape York district that the race characters are most clearly seen. The average Eskimo has brown or copper-coloured Mongolian features, straight, black hair, high cheek-bones and a heavy jaw, in stature only slightly less than most Europeans. This peaceful and unwarlike folk, who probably first reached Greenland not more than a thousand years ago from the interior of Canada, though their habits are unhygienic, attract us by their friendliness and sense of humour and by their mastery over nature in her most severe moods. They take little thought for the morrow, but they bear bravely the hardships of their life.

Dr Nansen, in his sympathetic book on the Eskimos, thus sums up his impressions on Greenland. "It is a naked lonely land, like no other land inhabited of man.

"But in all its naked poverty, how beautiful it is."

GREENLAND GEOGRAPHICAL SUMMARY

Natural Division. Ice capped northern insular plateau (Cf Antarctica). Antipodal to King George V. Land in Antarctica, the east coast is infested with pack ice as are Wilkes Land and Adelia Land. A slight shift eastward would make the coasts resemble in position the Ross Sea coast of South Victoria Land, the west coast of Greenland is similarly ice-free in the summer.

Climate. Coastal Arctic tundra (Cf Arctic lands and Labrador). Inland ice cap with a carpet of scattered flowers during the brief summer, by contrast Antarctica is without flora and without large land-grazing animals like the musk ox and reindeer.

Industries. Fishing (cf Labrador). Mining for cryolite and graphite (Cf Spitsbergen coal).

GUIANAS

Three Colonies of Jungle & Savanna

by Lilian E. Elliott

Author of "Brazil To-day and To-morrow"

WHEN the north coast of South America runs away from eastern Venezuela dropping south-east from the great tangled marsh of the Orinoco delta the territory of ancient Guayana begins: you will find its name written "Caribana" on some of the old maps because it was a land where Caribs dwelt.

To-day the territory is reduced to three European colonies: one by the British, Dutch and French: yesterday it was still clothed with the fatal lure of El Dorado glittering as a hidden country where a gilded king reigned in the thronged city of Manoa: its golden streets reflected in the waters of Lake Parima. The identified site: objective of so many gallant and tragic adventures lies within the southern frontiers of British Guiana: near the Rupununi river the huge lake has dwindled to the pool of Amucu fringed with mermaid reeds and tall grasses: the shining city: the little Indian village of Pirara: to the north stand the pale naked rocks of the Pacaraima Mountains: south the deep primeval forest breeder of tales of fantasy.

Where Orinoco and Amazon Join

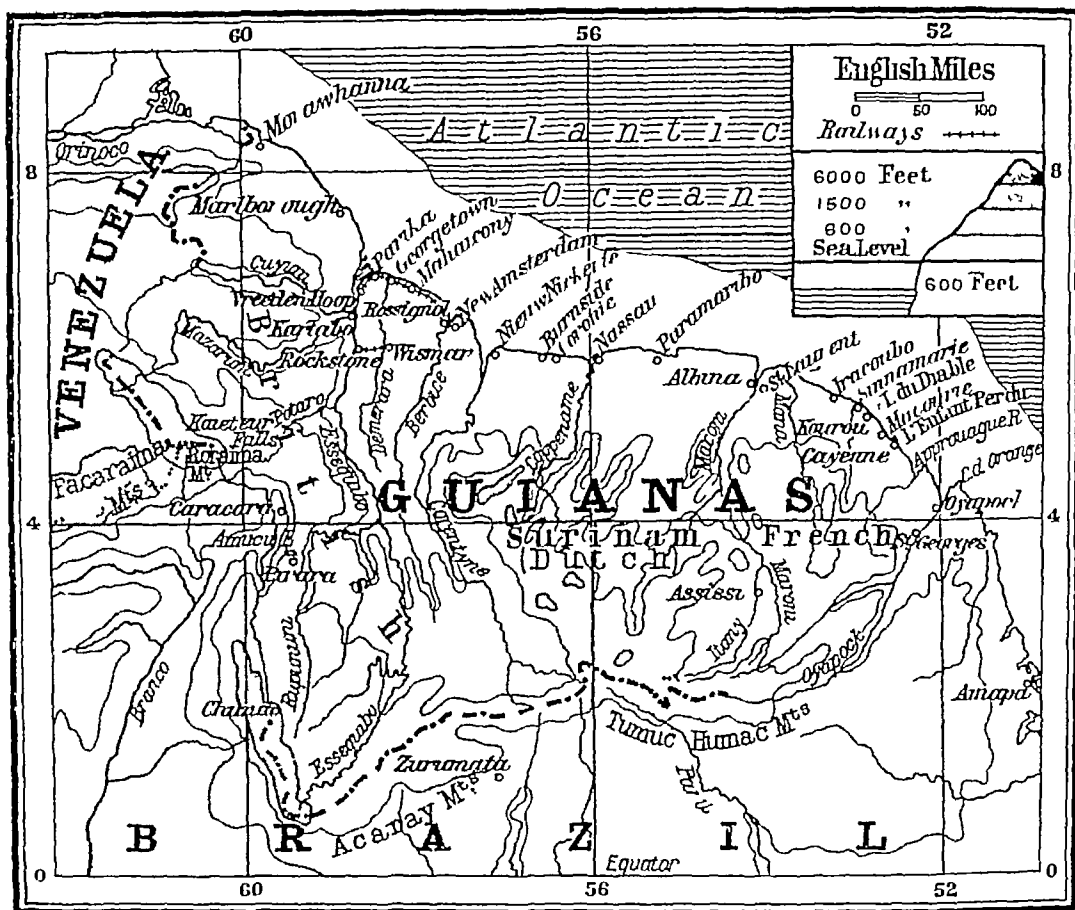
Once upon a time Guiana meant all the land between the Orinoco and the Amazon and since tributaries of these two rivers, flowing in opposite directions are actually joined by the natural channel of the Casiquiare the original territory was an island: now part of old Guiana is Venezuelan part Brazilian and the extent of the three colonies of Britain France and Holland amounts to something like 170,000 square miles. The keenly contested question of British Guiana's boundaries with Venezuela

and Brazil (settled by arbitration at the beginning of this century) entailed a careful survey of the magnificent interior and as a result this colony has been excellently surveyed and mapped. Much less is known of the hinterlands of French and Dutch Guiana but in all cases the important settled towns stand upon the coast beside a river: their backs to plain forest and mountain and their faces to the Atlantic.

Beak Formed by Mergers and River

The Guianas have many topographical attributes in common. Along the littoral is a wide margin of alluvial land (generally a blue clay) rich and humid varying from ten to fifty miles in breadth: this strip is almost too well watered by the voluminous and rapid rivers that in the wet season overflow: their banks create swamps and carrying solid matter out to sea form banks anchored by palms and mangroves. The cultivated regions of the colonies are practically confined to this coastal belt.

Behind the foothills and terraces a few hundred feet high create a wonderful series of grasslands: the famous savannas of Guiana haunt of birds and game and to-day grazing great herds of cattle. British Guiana owns about 125,000 head. Beyond are wild and terrifically broken regions: the mountain masses standing at a mean elevation of 3,500 feet with heads rising to 8,000 and 9,000 feet. None of the rivers is navigable in these upper reaches: all their waters pour from mountain fastnesses: tear a way through dense forest and jungle and dash through gorges in a succession of "runs" and cataracts negotiable only



COASTWISE TOWNS AND MYSTERIOUS HINTERLAND OF THE GUIANAS

by the tough dug-outs employed by the riverine Indians

Splendid forest clothes the bases of the ranges, yielding precious gums and balsams and medicines (copaiba, quinine, jalap, sarsaparilla, balata rubber, vanilla), exquisitely coloured cabinet woods and such hard timbers as the celebrated "greenheart," recently chosen for under-water construction in the Panama Canal, as the most durable in all the world. Here dwell the native races, withdrawn for four hundred years from the coast.

The Guianas are hot countries, not far north of the Equator, but the heat of the coast is tempered by prevailing winds from the sea, and residents are proud to claim an average of no more than 80° F. The rainfall is heavy all along the coast, but most copious in French Guiana, often recording 135 inches in a year, against British Guiana's

90 inches, and there are two wet seasons, December to February and June to August. Insect pests breed fast in the rainy months. Just as these lands count themselves rich in orchids and ferns and palms, in such botanic treasures as the Victoria Regia lily, and in animal life that includes the macaw, egret and humming birds, deer and peccary and tapir, jaguar, ocelot, puma, monkey, raccoon and sloth, so are they over-endowed with mosquito, tick and sand-fly, scorpion and centipede, and dangerous snakes, including the enormous anaconda.

Alike in most physical characteristics, the three Guianas have each acquired or inherited marked differences. French Guiana, with an area of about 34,000 square miles, is almost enclosed by the Oyapock and the Maroni rivers, with the barrier of the Tumuc Humac Mountains in the south. Off its coast



BRUCE GORDON GORE

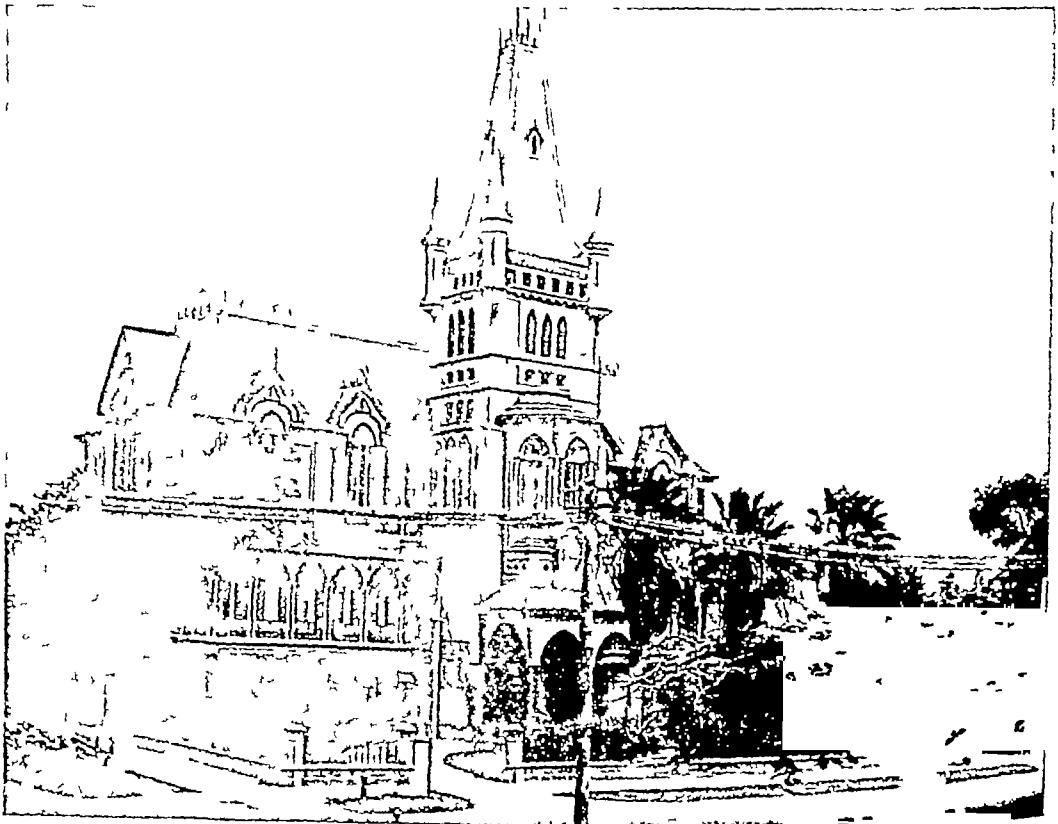
MAJESTIC GRANDEUR OF THE KAIETEUR FALLS ON THE POTARO

Here the Potaro, tributary of the Essequibo, makes a sheer drop of 74 feet, the falls being about five times as high as Niagara with a width of from 350 to 400 feet. Owing to the small number of established industries requiring power and the remoteness of the falls, which are eleven days' journey from Georgetown, British Guiana, the harnessing of this vast volume of water is impracticable.

are a few real islands, L'Enfant Perdu, for example, and the Iles du Diable, known to fame because, upon the chief of these Isles of the Devil, Dreyfus spent the long years of his captivity

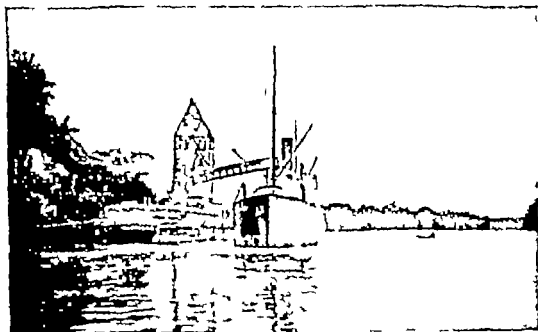
For France once used her share of the golden region as a place of punishment, about one in seven of the inhabitants of the colony was a convict or deporté, while a large proportion to-day are descendants of former exiles, there are less than 50,000 people altogether, as against Dutch Guiana's 100,000 and British Guiana's 310,000. At Cayenne, the capital, on a little island at the mouth of the Cayenne river, is a small resident group of French officials, with merchants and the nondescript flotsam of a tropic backwater. Fourteen thousand people now live in the chief town on the Maroni river, St Laurent, boasting telegraphic connexion with Cayenne, and served by small vessels calling for tobacco and sugar, balata, rose-

wood, pepper, hides and feathers, that the colony sends to Europe. St Laurent looks over into Dutch territory, and, as the Guianas have always exchanged runaway slaves, ne'er-do-wells and itinerant adventurers, there was a certain leakage of convicts, St Georges on the Oyapock river, on the eastern frontier, looks into Brazil. Between the two is a sparse edging of settlements, all at river mouths on the Approuague, with its placer gold industry, on the Sinnamarie, the Mana, the Kourou, the Macourie, the Iracoubo. None compares with Cayenne, a dreamy, palm-embowered, sun-drenched town where grass springs in the streets and one is immediately reminded of Port-au-Prince in Haiti. Behind the river and coast settlements the country is nearly as much in the hands of the indigenous folk as it was before Ojeda sailed his ship exploring along these shores. Across the west frontier, the Maroni



FINE TOWN-HALL IN THE CAPITAL OF BRITISH GUIANA

Buildings such as the town hall and the half-timbered Victoria Law Courts and Cathedral justify the pride which Georgetown takes in them. The streets of the town, shaded with trees, are wide and clean, many having canals, called "trenches," running down the centre, on which flourishes the Victoria



British Guiana, 1917

STEAMER LOADING BAUXITE ON THE DEMERARA RIVER

It is chief of all component of metal the aluminium and is used in the manufacture of alloys, has been for long on the Upper Demerara and in the neighbourhood of Yanikita. The Demerara river, the Maracay Mountains and flows into the Atlantic at Georgetown. Its length is about 140 miles of which the 40 miles are navigable by large ships.

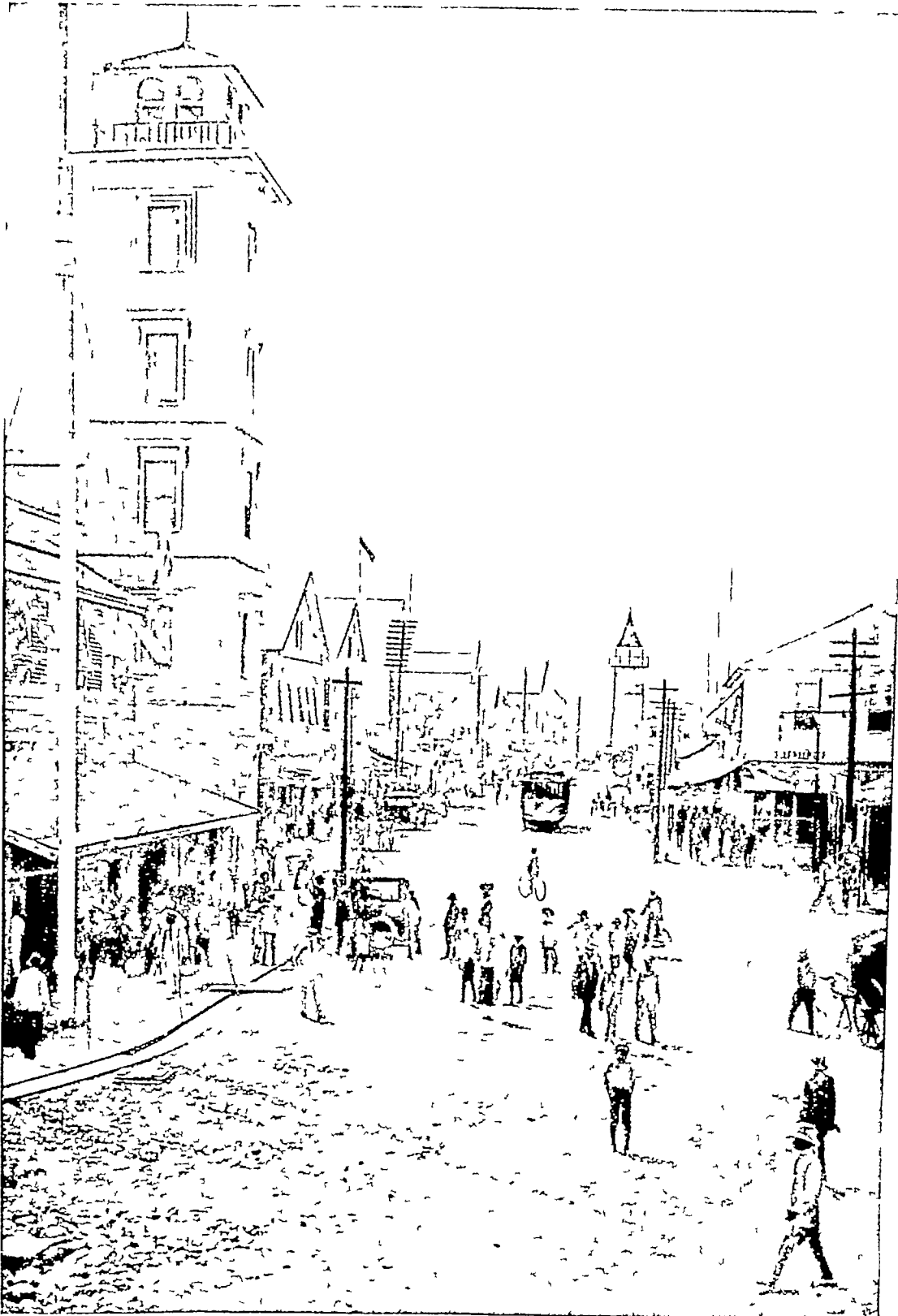
becomes the Marowayne river with the Albana settlement 40 miles up-stream government steamers of Dutch Guiana (its old name is Surinam) ply up and down the next big river is the noble Surinam and here is Dutch Guiana's capital Paramaribo with 40,000 people and as neat and clean and reminiscent of old Holland as Willemstad in the island of Curacao. Holland, in 1667 accepted this colony from England in exchange for New York.

Farther west is the Coppename river with Nassau village at its mouth on the very lip of the sea stand little Burnside and Coronie and at the frontier with British territory where the Corentyne river discharges, is Nieuw Nickene, a pleasant sheltered harbour three miles up-stream. The rivers of the Guianas are the main roads, and the inland settlements are seldom more than collecting places for the wild rubber, the timber and feathers brought from the forests.

British Guiana includes about 90,500 square miles and is the most progressive of the trio of colonies. The deep and

beautiful interior regions are better known canals and roads (160 miles open or under construction) and 200 miles of cattle trail are maintained by the government. The mineral manufacturing extractive and planting industries are in a comparatively advanced state and this is the only part of the Guianas that owns railways. There are three strips: the first 60 miles long running east from Georgetown to Mahaicony and thence to Rosignol on the opposite side of the Berbice river from the town of New Amsterdam has the distinction of being the oldest of all railways in South America; the second 70 miles runs west to join Parika to Vreeden Hoop and the third, about the same length links the head waters of the Demerara to the main stream of the Essequibo in a flourishing gold-washing region.

Dredging companies, operating on the river produce from fifteen to twenty thousand ounces of gold per year but this record is not so dazzling as that of the diamond hunters. British Guiana and Minas Geraes in Brazil are the only two

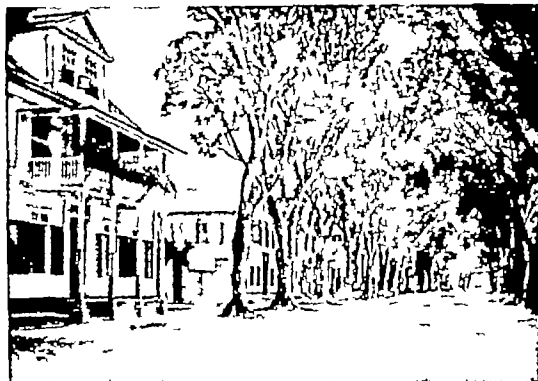


WATER STREET, GEORGETOWN'S PRINCIPAL COMMERCIAL THOROUGHFARE
Georgetown, the capital of British Guiana, with a population of about 70,000, lies on the right bank of the Demerara, which is lined with wharves or "stellings", behind these is busy Water Street with its clanging trams and its multitude of stores. Other notable streets are Main Street and Brick dam, so called from its brick-like roadway of burnt clay, with its fine avenue of cabbage palms

regions of South America where these jewels are found. To the west of the Essequibo are two rivers flowing from Venezuela the Cayuni and the Mazaruni and along these banks diamonds are discovered. A fair annual average of stones was formerly 16 000 carats worth perhaps £100 000 but in 1933 production rose to nearly 15 000 carats

or river banks it would need the certainty of immense returns to justify operations in the wild forests and rugged heights of the interior

The Hollander first established a working alliance with the Indians they will now as then bleed the forest trees for rubber and gums bring feathers and skins to the river trading posts the



LOOKING DOWN HEERENSTRAAT THE MAIN STREET OF PARAMARIBO

Paramaribo, the capital and chief port of Dutch Guiana, has a population of about 4 000 and is almost a well-drained town. The broad straight tree-lined street flanked on either side by magnificent trees, the canal running at right angles to the river and the large squares are all reminiscent of towns in the Netherlands. A railway line runs from Paramaribo to IJmuiden on the Sara creek

worth about £1,000,000. 6,000 hunters are at work. The stones are small but very beautiful. Thirty foreign buyers recently opening offices in Georgetown have created a small Hatton Garden of the Guianas. The largest stone yet found weighs 49 carats.

Deposits of bauxite were actively worked during 1923, and signs of petroleum seepage appear to justify old faith that the great oil belt stretching across the top of the South American Continent will be found on the Guiana coast. Mining enterprise is necessarily confined, in such a region to the littoral

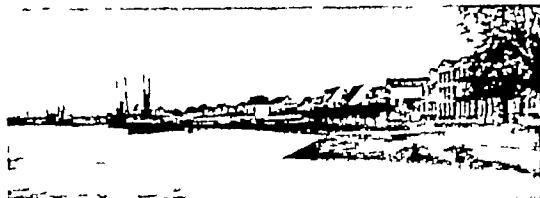
chiefs are solemnly entrusted with the staff of office and keep order in their own domains of the dark forests. They contribute to the trade of the colony bringing down forestal products by the three great waterways the Demerara, Essequibo and Berbice from points where river steamers cannot penetrate but with the rubber world depressed the demand for balata decreases.

The exports of all three Guianas have a family likeness but those of the British colony running up in good years to over £4,000,000 are about eight times as large as those of each neighbour



CIVILIZATION'S FIGHT AGAINST THE FOREST CLEARING TIMBER NEAR CAMP CHARVEIN

French Guiana has immense forests rich in every kind of timber. This includes trees such as the wacapou, the finest of many hardwood trees, the greenheart and mora, largely used in ship building, the silverbally, cedar and crabwood, besides innumerable giant palms. Settlements are almost entirely confined to the littoral and alluvial districts owing to the difficulty and expense incurred in clearing away the dense tropical jungle. This is being done in the photograph by convicts, for until 1924 the colony was used as a penal station. Camp Charvein on the Maroni river was one of the many prison settlements



Dr. C. F. Schach

QUAYS AND PIERS ALONG THE BANK OF THE SURINAM RIVER

Surinam, or Paramaribo as it is more properly called, is situated on the Surinam about 13 miles from the mouth and has a deep water front of about one mile where the main steamers berth alongside. The town contains over a third of the total population of the colony and exports gold, cocoa, rice and bananas, importing textiles, grain, meat and iron manufactures.

Purchases are regulated by sales, and of these purchases by Guiana the Mother Country lost her former major share during the Great War to the United States, but latterly Canada operating steamers to the West Indies has made a gallant bid both as salesman and purchaser. The Dominion of Canada needs exactly the tropical supplies that Guiana produces luxuriantly, and with such encouragement and an understanding of the resources and charms of this fertile outpost of empire the British

Guiana production of sugar may rise to the million of tons calculated as possible.

Georgetown bright clean with sunny blue-shadowed streets shaded with great trees and bordered with wooden lightly painted houses raised on legs and gay with scarlet flamboyant and purple bougainvillea that festoons every verandah and balcony, is a lively city of 70,000 people and chief port of call of the Guianas. Along the main streets, right angled as when the Dutch first built the city then called Stabroek, run



A. V. L. Gause

BEAUTIFUL VISTA ALONG THE UPPER REACHES OF THE SURINAM

This river is the most important in Dutch Guiana, vessels of considerable tonnage being able to reach Paramaribo, while for smaller vessels it is navigable for a much greater distance. It is the natural highway to the gold-fields, a regular service being run to Bowland. The chief affluents of this river is the Commewijne along the banks of which are scattered sugar and cacao plantations.

bustling trams, while motor-cars dodge the slow-moving oxen. Most of the old canals that once rippled through every street are filled in and gaily planted, but stretches can still be found where water-lilies flourish.

Every race and colour is seen upon the cheerful streets of Georgetown, which is the seat of government. White-clad Europeans, North and South Americans, Chinese, tending market gardens and curio stores, Syrians, petty traders of all South America, turbaned Hindus with their veiled women, chattering, blue-black negroes, Caribs, come to town in unaccustomed garments, Canary Islanders, a drift of folk from all parts of the West Indies and the Caribbean Sea.

The British, despite the heat, have their sports clubs and golf links, there is a race-course, plenty of motor-boating, fishing and shooting, and a pleasant social life. The business of the town includes, besides all the export and import trade of the colony, the working of rice, sugar, molasses, citrate of lime and lime-juice factories, as well as other factories for boots and shoes, matches and ice. And there is a government dry dock. But the pride of Georgetown is its superb Botanic Gardens, where ten miles of pathways border a glorious riot of tropic beauty, there are pools where the manatee or sea-cow breeds, and scores of lovely water-birds nest as if in wild country.

Of this wild country the traveller who visits the wonderful Kaieteur Falls will have a glimpse, if he takes the longer route, all the way from Georgetown, up the Essequibo, to Rockstone, passing at Bartica the junction of the Mazaruni and Cuyuni with the Essequibo, and sighting Kartabo, the government outpost for naturalists, from Rockstone a small launch and then a walk bring you to Kaieteur, a five days' trip. Cataracts have to be negotiated, an experience exciting enough, but the great impression made upon memory is of the majestic forest, draped with air plants and "bush-rope", of the night chorus of the howler monkeys, the ringing note of the bell-bird, the clear sweet call of the troupial, of the strange filtered light, green and golden, in which one sees the dug-out of the cinnamon-skinned forest folk creeping round a ferny bend.

Kaieteur itself is a glorious sight. The waters of the Potaro break through the high bare sandstone mountains to drop sheer for 741 feet into a forest-hemmed ravine. Kaieteur is about five times as high as Niagara, set in a frame of breath-taking grandeur.

It is a fit companion picture to that of the mountain Roraima, raising its fairy pink precipices 9,000 feet above the forest. Roraima stands upon the triple boundary of British Guiana, Brazil and Venezuela, a lovely sentinel of the land of El Dorado.

GUIANAS GEOGRAPHICAL SUMMARY

Natural Divisions Mangrove fringed coastal swamps, a cultivable narrow coastal belt. Terraces and slopes leading to the Guiana Highlands, which form the boundary to south and west. British territory has the wider extent of riverine lowland in the interior.

Climate and Vegetation Tropical temperature 80° F, tropical rainfall 80 inches at least, two rainy seasons. The vegetal cover is mainly natural forests on the uplands, gallery forests along the ridges, savanna grasslands on the lower levels, and mangroves and palms on the coast.

Products Cattle (cf. Brazil and Queensland). Diamonds (cf. South Africa). Rice (cf. the West Indies). Balata and gums, hardwood timbers (cf. the

Amazon Valley, Brazil). Cane sugar (cf. Jamaica).

Communications and Trade Coastal services connect the towns. Rivers lead inland to the edge of the upland. Railways are operated in British Guiana. Canada is renewing an ancient trade by a bid for Guiana markets.

Outlook The Guianas rely entirely upon the rest of the world, foreigners exploit their riches, the value of the products and the stimulus to the extractive industries and to cultivation depend upon world price movements. In this sense each is a parasitic colony with a future outside its own control. The abolition of the penal colony in French Guiana is a step forward.

GUINEA LANDS

Coastwise Belt 'twixt Sea and Sudan

by Evans Lewin

Author of "German Rule in Africa"

WHAT is known as Guinea consists of a broad strip (from 100 to 200 miles wide) commencing at the mouth of the Senegal in about 14° North latitude and extending southward to the southern portion of Angola in about 16° South latitude. These lands are further divided into two portions, Upper and Lower Guinea, the former known popularly as West Africa being the part with which this article is mainly concerned.

The term Guinea as applied to these countries is now almost obsolete. It has no precise geographical significance but is applied loosely to a region with a fairly uniform littoral almost everywhere flat and frequently separated from the ocean by narrow strips of sand behind which are numerous marshes and lagoons. Inland the region extends by a series of broad terrace-like steps to the great central plateau known as the Sudan into which Guinea merges without any sharp or indeed observable topographical feature, the only possible limit being that shown by the gradual changing of the woodlands and savannas into the grass and scrublands.

Extension of Coastal Footholds

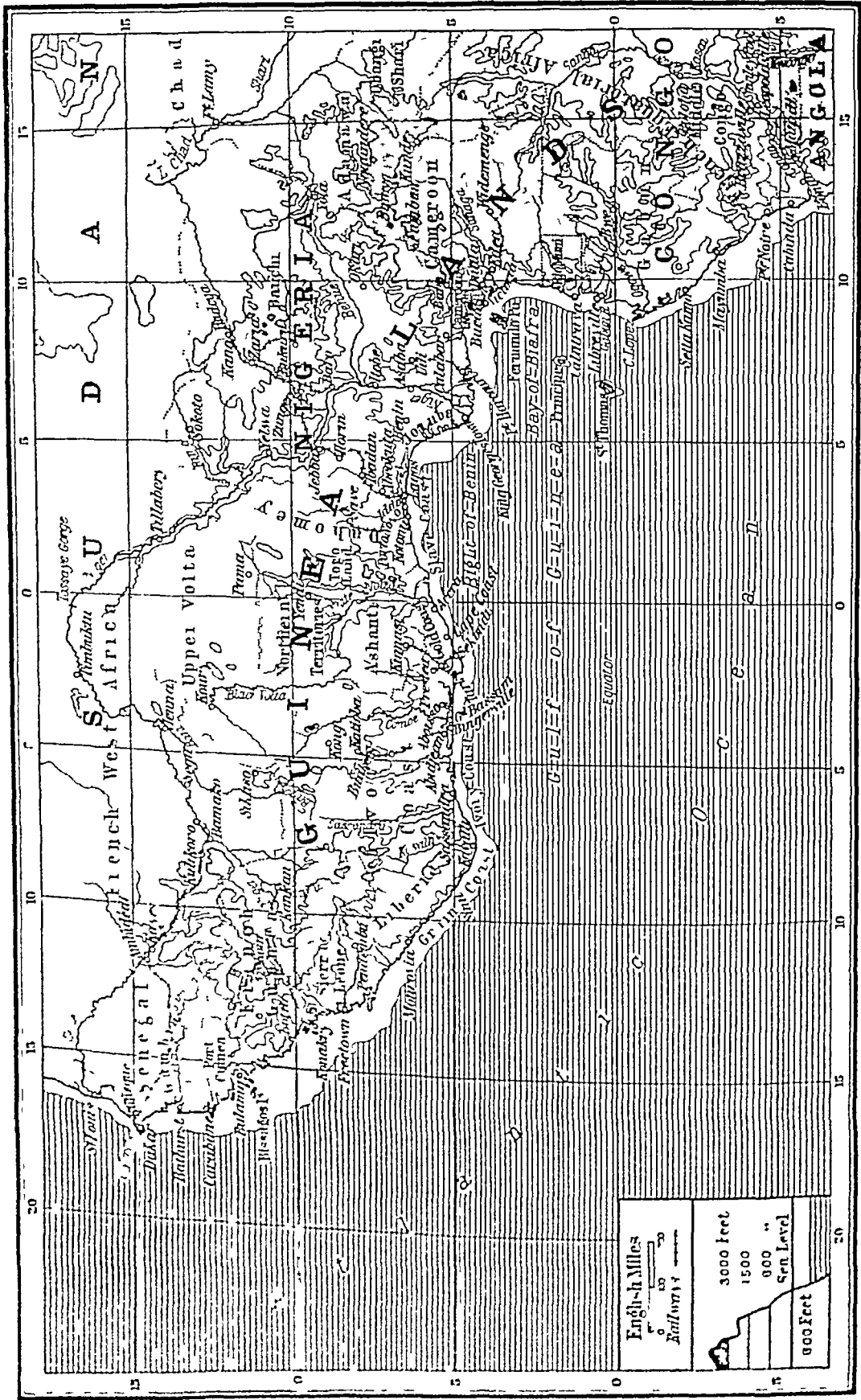
The whole of this region, with one exception, has been divided between the European colonising nations who when its potentialities were finally recognized were not slow in extending their coastal footholds towards the interior plateaux. Although Portugal, France, England and even Spain had established, and had succeeded in maintaining trading posts on the coasts while other peoples such as the Dutch, Danes and Brandenburgians had founded but subsequently abandoned their

settlement, it was not until the Germans became active in the early eighties of the last century that the scramble for African territory led to any actual definition of the boundaries of the existing colonies.

Corridors of Entry to the Sudan

These in their order from north to south are Senegal, Gambia, Portuguese Guinea, French Guinea, Sierra Leone, Liberia, Ivory Coast, Gold Coast, Dahomey, Nigeria, which is separately treated elsewhere in this work, Cameroon, Rio Muni, Spanish Guinea, and Gabon. All these colonies are more or less similar as regards climate and vegetation and with the exception of the three first are bound together by a broad band of equatorial forest which extends almost without an extension break except in Dahomey from the south of Sierra Leone to the middle of the Gabon Colony. Four of them, Senegal, French Guinea, Ivory Coast and Dahomey, are part of the vast territory of French West Africa to which they are attached under a governor-general although each retains its separate entity as a colony.

They form the corridors of entry by means of rivers or railways to the western Sudanese plateau which is the hinterland of most of these territories. Three of them form part of what is known as British West Africa but unlike the French colonies which are parts of one great dominion into which they extend on their northern or eastern boundaries they are divided from each other by wedges of French or other foreign territory. They have not therefore any administrative unity as have the French colonies. These British colonies are Gambia which consists of an enclave at



GUINEA'S LONG CURVE OF SWAMPY COASTLANDS FROM SENEGAL TO CONGO

the mouth of the Gambia river commanding the navigation of that great waterway Sierra Leone which was originally founded as a home for freed slaves, and the Gold Coast Colony which consists of the colony proper Ashanti and the Northern Territories.

Attached to the Gold Coast is a small part of the former German colony of Togoland the other and larger portion now being part of French

The coastal lands of West Africa are distinguished from the countries farther north and farther south by having a littoral tolerably well provided with harbours although there are long stretches where natural anchorages are deficient. It was possible therefore for the early voyagers by creeping along the coasts in their tiny vessels and anchoring in the numerous small bays and openings to advance slowly from



Rising gallery

CHILDREN LEARNING TO SPIN COTTON IN THE FRENCH CAMEROON

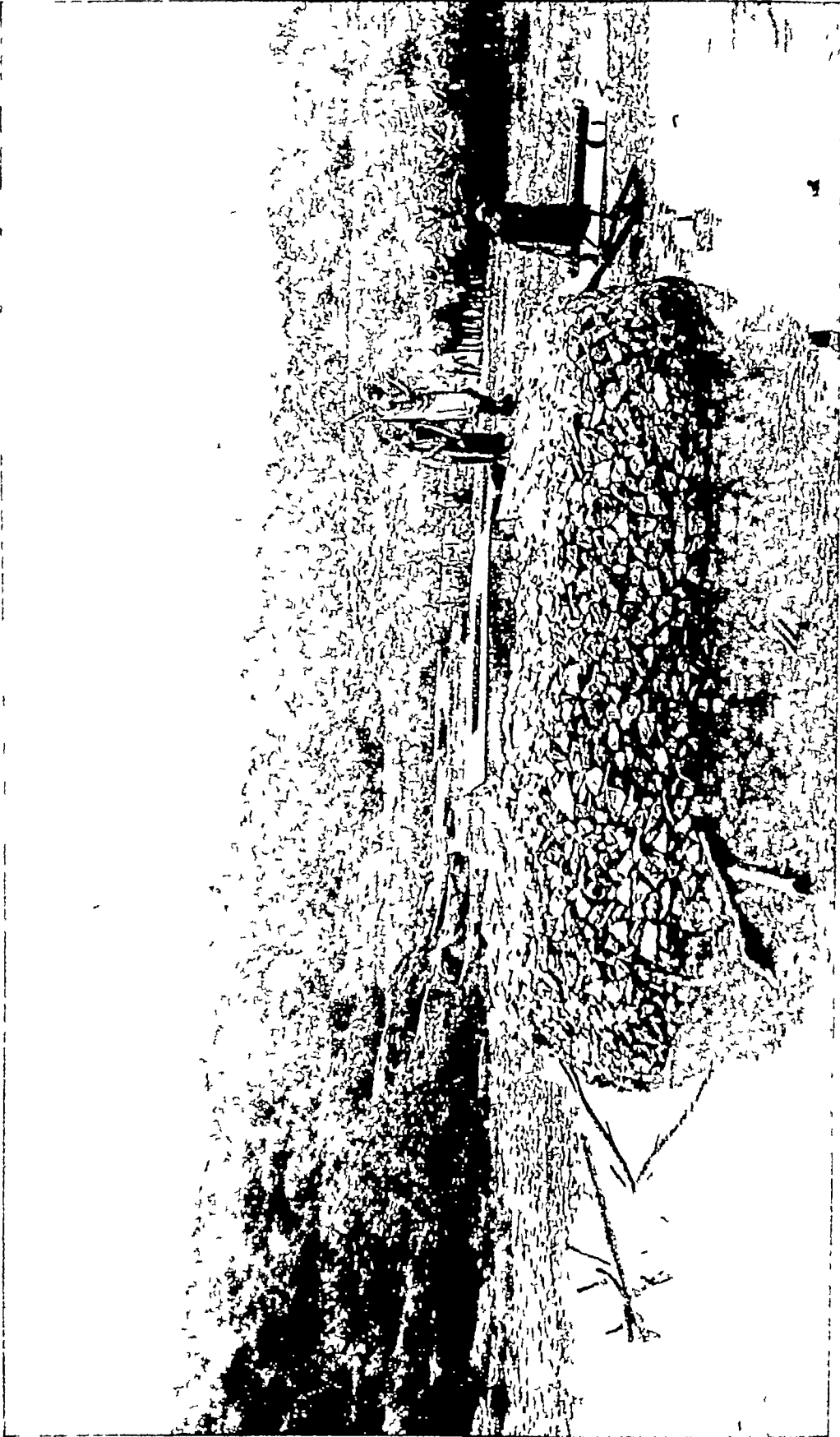
Cotton has long been cultivated by the natives to some extent, but as a result of the importation of European cotton yarns the industry has fallen more or less into desuetude. Under the French the natives have been encouraged to teach their children some useful and profitable trade, with the consequence that the country is becoming more prosperous and more civilized.

Dahomey Gabon and the greater part of the former German Cameroon are attached politically to French Equatorial Africa, described elsewhere under the heading of Congo.

There is also one state that retains political—though scarcely economic— independence as a negro republic. This is Liberia originally founded under the auspices of the United States, France and Great Britain as a home for released slaves and now the home of a mixed negro population with indigenous races in the hinterland.

point to point and to shelter from the prevailing storms. The unhealthfulness of the climate however generally prevented the establishment of ports and trading-stations except at places where the coast was most exposed to the full force of the Atlantic waves.

Along the Ivory Coast and along part of the Gold Coast as well as the coasts of Togo and Dahomey are large lagoons approached by openings through the sandbanks which protect them from the sea. Throughout this region communication along the coast is possible



F W Taylor

WELL CEMENTED IN BY THE GERMANS AT BANYO IN THE SAVANNAS OF THE ADAMAWA DISTRICT

Banyo, situated on the border between French and British Cameroon, is the centre of a cattle breeding region from which there was at one time an active export of cattle, but this has diminished owing to a heavy export duty. Cattle are kept all over the north and centre of the colony, chiefly by the Fulas, the grasslands of the Adamawa locality affording excellent grazing, but south of the Sanaga river stock farming is impossible owing to the presence of the tsetse fly. Honey and wax are also plentiful in north Adamawa, Banyo and the Dume district. The territory was transferred from Germany to France by the Treaty of Versailles.

from lagoon to lagoon. The principal natural openings or harbours suitable for ships are the mouth of the Gambia which is a great waterway leading towards the interior, the magnificent harbour of Freetown, Sierra Leone, the Cameroon estuary, and the estuary of the Gabon river. But numerous other harbours have been developed, such as the French port of Dakar in Senegal which is one of the principal entries to the French Sudan, the port of Konakry in French Guinea, the ports of Sekondi and Accra in the Gold Coast.

As one travels inland from any of these ports there is a gradual increase in elevation until the interior plain is reached, but with one or two exceptions the whole region is deficient in great mountain systems such as distinguish east-central Africa. At Freetown a range of no great height ends abruptly in the Sierra Leone peninsula, and at the Cameroon estuary a large range extends north-eastwards from the lofty Cameroon peak into the region known as Adamawa. This range is volcanic in origin and is continued across the sea in the Spanish island of Fernando Po to reappear at various points in the Atlantic Ocean.

Mountains of West Africa

The only other notable mountains are the hills of Futa Jallon. This district however is rather an elevated plateau capped by hills than an area of mountains. It is of great importance as the source of many of the large rivers of West Africa, such as the Gambia and Senegal. In this respect though not in the height of the mountains it may be compared with Abyssinia which forms the catchment area in the north-east of the continent.

In a region generally favoured with abundant rains the rivers are naturally important. West Africa is therefore entirely different from northern Africa for stretching from the mouth of the Senegal to the mouth of the Congo are numerous great waterways, some of great length and most of them affording

though frequently broken by rapids, means of communication for native craft or small launches. Numerous smaller but yet important rivers such as the Kavalli, Savandra and Volta, drain southwards through the Ivory Coast and the Gold Coast. Owing to the gradual descent to the coasts many of these rivers are slow moving except where they fall over rocky descents and pass through narrow valleys, but some of the shorter coastal rivers are too rapid and broken for navigation.

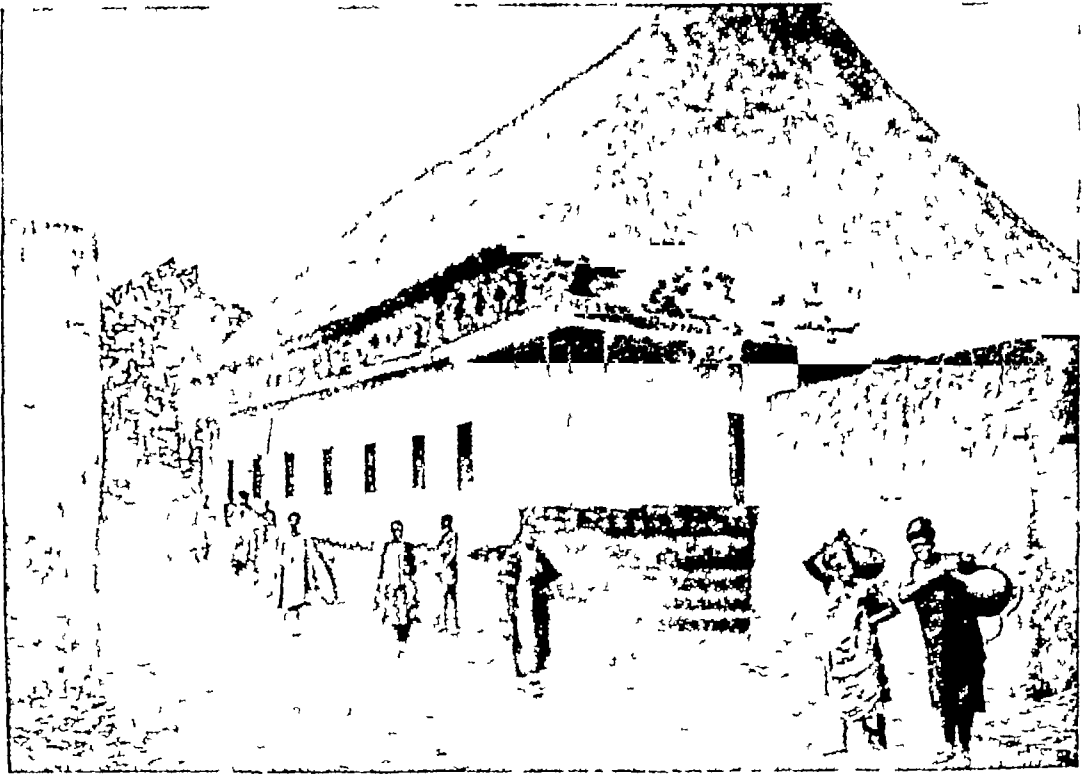
The Climate for the Whites

The region has four well marked geological types: crystalline rocks, cretaceous strata, tertiary beds of loam and sand, and the delta and mangrove swamp. The area of the last named is a characteristic feature of the coast from French Guinea to the Congo, but all are small in comparison with the colossal swamp at the mouth of the Niger into which more than twenty large rivers discharge their silt-laden waters.

The climate of West Africa has been fatal in the past to Europeans. Even now, with all the advantages of modern medical science and the great advances that have been made in the practice of tropical hygiene, great care has to be exercised by those who desire to reside in the country. Frequent journeys to Europe are requisite and the small white population does not live in any part of Guinea as a settled community, but as temporary sojourners whose duties as officials, merchants, engineers or miners oblige them to live in a country that otherwise would be inhabited solely by the negro races.

Healthy Exceptions to the Rule

Nevertheless in many parts the climate is such that it is not essentially unhealthy and diseases arising from it can generally be avoided, though the latitude it engenders can not. The most unhealthy portions are the swampy coastal areas and the deltas of the great rivers. The healthiest are



WHITEWASHED BUILDING OF THE NATIVE SCHOOL AT FUMBAN

Fumban, the chief town of the district of the same name, is in the French Cameroon about 150 miles north east of Douala, the main seaport and present capital. In the coastal regions the climate is hot and moist, but in the interior the temperature varies considerably being highest in the Lake Chad basin. The exports include rubber, palm oil and kernels and cocoa.

the highlands around Freetown, and Buea in Cameroon, the sandy and exposed coasts wherever lagoons do not exist, and the more elevated inland plateaux where the rainfall is small.

The area between 3° or 4° latitude on either side of the Equator has a high temperature with little variation. The dry season is reduced to a minimum, and there are two definite wet seasons, the rainfall being particularly heavy near the coasts in many parts of West Africa. Beyond this area, especially in the north, there is usually one long wet season and one long dry season. The limits indicated above are, of course, only approximate. The rainiest district is stated to be just west of Mount Cameroon where 390 inches have been recorded, and the lowest rainfall occurs in the regions merging into the Sudan and Sahara. The most trying feature of the climate generally is the predisposition to the multiplication of mosquitoes, the tsetse-fly and other disease-bearing

insects, though the diseases they carry cannot be said in any strict sense to be due to the climate.

Unlike the flora of many tropical countries, particularly that of South America, that of Guinea cannot be regarded as very varied, but it is extraordinarily rich in economic vegetation, the uses of which are being developed for the service of mankind. In the more arid regions of the north tamarinds and doom palms alternate with cultivated areas and small forests. Farther south on the coastlands and in the region of savannas and rain-forests are the oil-palm, native to West Africa, the coconut palm, the bamboo and numerous kinds of rubber-bearing plants, together with cotton, cassava, yams, maize, rice, cocoa, kola, and the banana and plantain. There are very numerous nut-bearing trees, which are of the utmost value in commerce. Among timbers are the mahogany, cedar, ebony, red iron-wood and various kinds of yellow woods.

Throughout West Africa there stretches a great forest area—one of the most important in the world. This region corresponds with the area of abundant rainfall and in many districts little has been done either to develop or conserve the great forest resources. Where they have been developed as in the Gold Coast where the trade in mahogany is extensive considerable areas have been cleared but frequently the forests extend in masses of trees of considerable height linked together by lianas or climbers with occasional clearings made for native villages. In the evergreen forest which extends into the Congo region grasses are absent herbs scarce and the soil damp and rich in fungoid growth and frequently swamps.

South of this great forest area are the mangrove forests of the purely coastal districts extending from the Ivory Coast to the delta of the Niger which is one vast mangrove swamp and thence continuing southward into Cameroun.

North of it are the woodlands and savanna. This is a park-like formation rich in herbs and particularly grasses much more open than the rain forests and containing within its area numerous freshwater swamp forests occupying the vicinity of the great rivers. The savanna lands are characteristic of parts of Sierra Leone the Northern Territories of the Gold Coast and the northern hinterland of Cameroon as well as considerable portions of Dahomey and other parts of French West Africa.

In the economic development of the vegetable riches of Guinea considerable progress has been made. The product of the oil palm is a highly important feature of its economic life particularly in the region extending from Sierra Leone to Cameroon from the seaboard towards the interior. Here a great industry has been set in motion through the enterprise of large European oil crushing firms who are now drawing enormous supplies of oil nuts from West



CLEARING A COCOA PLANTATION IN THE IVORY COAST

The area under forest in the Ivory Coast is estimated at 74,000 square miles out of a total area of 123,000 square miles. Cocoa plantations, belonging both to European and native planters, are on the increase, for cocoa grows well and forms one of the chief exports, and there are several centres where the natives receive instruction in the method of fermenting the beans.



LACUSTRINE DWELLINGS AT KOTONU, THE CHIEF PORT OF DAHOMEY

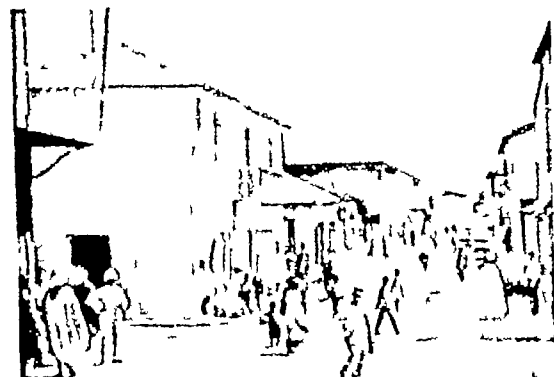
Kotonu with a population of 2,500 is a well planned town and busy trading centre lying in an angle formed on the south by the sea and on the east by the channel leading to Lake Nokue. The chief exports are maize, palm kernels and oil, copra and kola nuts. From here a railway runs to Savi, a distance of about 156 miles, with a branch line to Whydah.



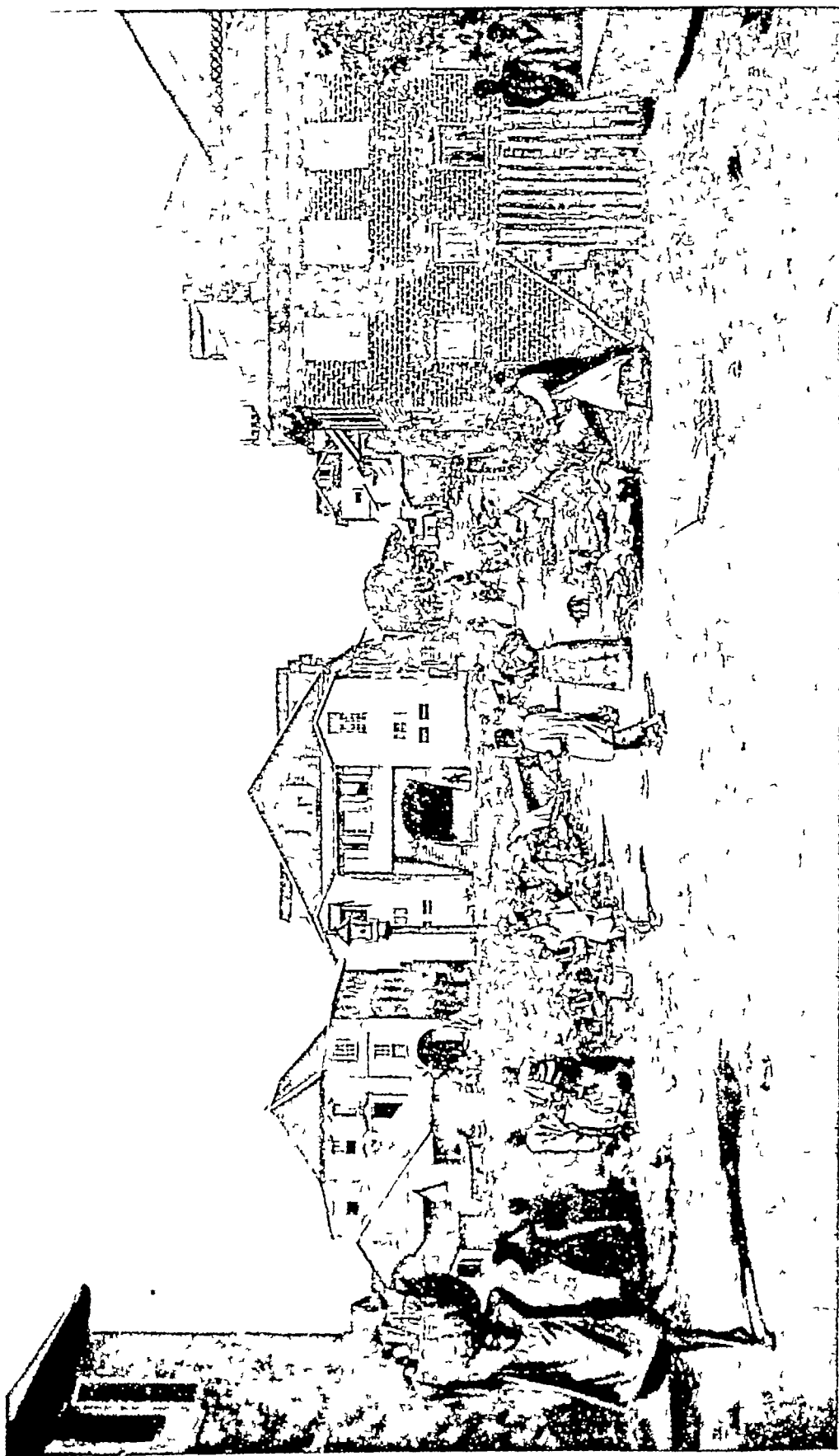
Government of French West Africa

NATIVE DWELLINGS IN THE FRENCH COLONY OF DAHOMEY

Dahomey, a very populous colony of France in West Africa, has an estimated population of 842,240 and an area of 42,460 square miles. The natives in the coast regions are good agriculturists, the chief crops being maize, manioc, yams and potatoes. The forests contain numerous trees which furnish hard timber. There is an abundance of bamboo and the oil-palms yield kernels and oil.

[illegible]

THE SECRETARY OF THE ARMY
WASHINGTON, D. C.
JAN 10 1964
TO THE SECRETARY OF THE ARMY
FROM THE SECRETARY OF THE ARMY
SUBJECT: [illegible]



LOCAL TRADERS IN A STREET OF FREETOWN, CAPITAL OF SIERRA LEONE AND GREATEST PORT IN WEST AFRICA

The area of the colony and protectorate of Sierra Leone, British territory in West Africa, are 4,000 square miles and 27,000 square miles respectively. Freetown, the capital of the colony, a port with the best harbour on the West Coast of Africa and a coaling station, is a busy trading centre, with a population of 44,000 situated at the north west extremity of the Sierra Leone peninsula. A cathedral, several educational establishments and public buildings, a railway and well built wharves have added to the importance of the town, which was founded in the eighteenth century as a residence for freed African slaves.

Africa. The oil palm is not planted and cultivated as is now the case in Sumatra and other parts of the East Indies, but advantage is taken of the natural tree which supplies native gatherers with all the kernels they require. Great quantities of palm kernels or oil are exported from Sierra Leone, Cameroons and French West Africa generally. In one year (1919) palm products to the value of nearly £12,000,000 came from British West Africa alone.

Cocoa is the principal export of the Gold Coast and is also cultivated extensively in Cameroons. The ground nut is a great feature of native cultivation in the Gambia Colony, where it is the principal product, and throughout Senegal and French West Africa generally. It cannot be too strongly emphasised that these three products alone render West Africa of great economic value. There is however another product, cotton, which although not as yet extensively cultivated for the European market, has always been an important item of native commerce. In West Africa there are vast areas suitable for this crop, though some of these areas cannot be exploited properly without greatly extended systems of railway transport.

Sources of Gold for 2,000 Years

Of the mineral products of West Africa gold and tin are the most valuable. The alluvial river gold of the Gold Coast was famed in the time of Herodotus who mentions trading on the coast, but it is only during comparatively recent years that actual mining operations have been undertaken. The principal mines are situated in the west of the colony in the Prestea, Tarkwa and Abooso districts and also in Ashanti. Here a great industry has been gradually built up. Manganese is mined in the Gold Coast and exported therefrom while throughout many parts of West Africa there are small workings of iron exploited by the natives by primitive methods for their own uses.

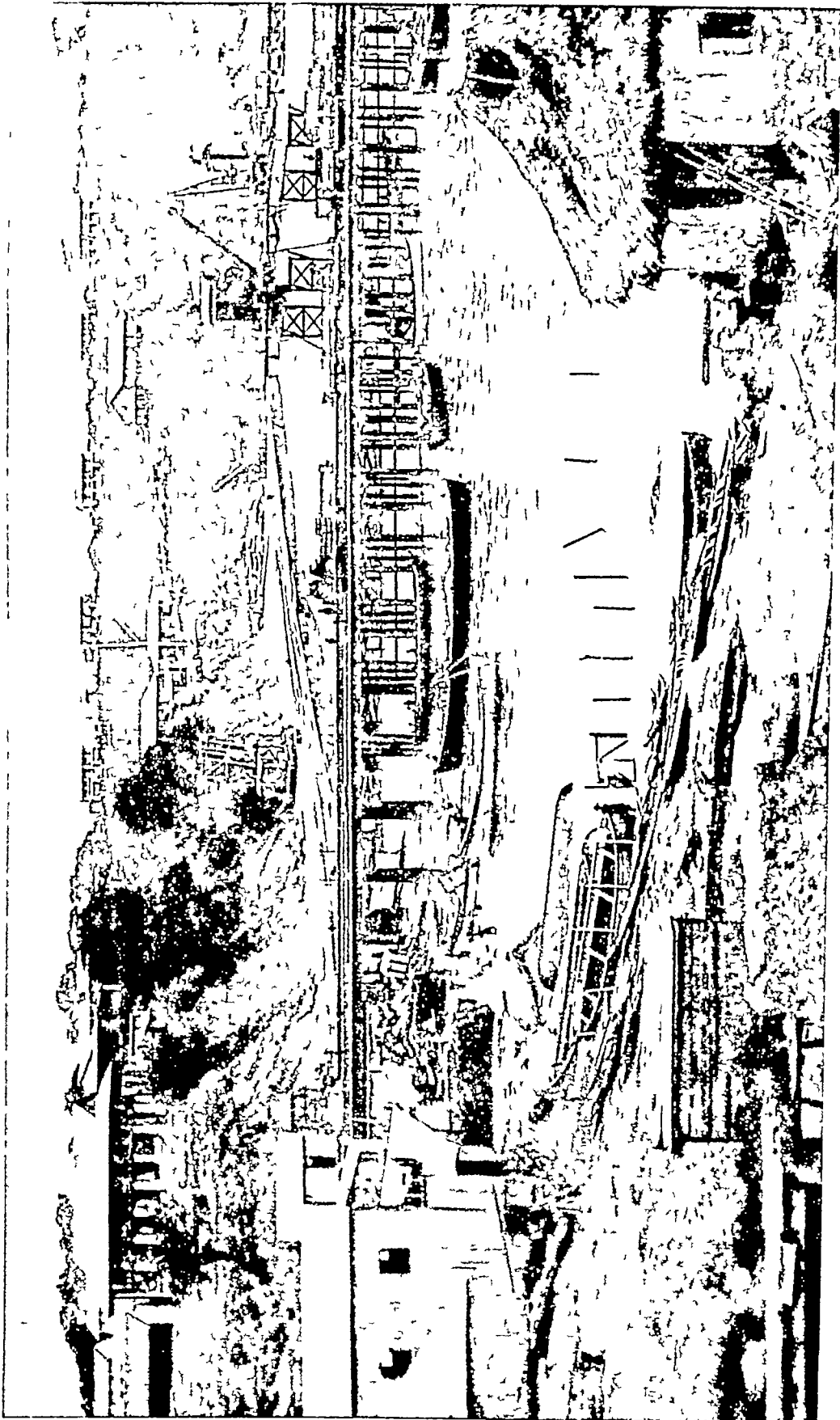
The primary occupations of the natives in a country like West Africa are naturally agricultural. In the more densely peopled districts the natives grow their own crops and bring them to the larger towns for sale. Although they are industrious and quick to learn they cannot be called skilled agriculturists for their methods are to-day almost as primitive as those of their early forefathers. The native farmers frequently work hard and where there is sufficient incentive they display considerable enterprise and are ready to adopt new ideas and methods if it can be shown to them that these are likely to prove of permanent benefit to themselves. It was entirely owing to this adaptability that the cocoa industry became so striking a success.

Instructing the Native Farmer

The policy of the European governments in West Africa is to encourage the natives by every possible means to become independent farmers, owning and working their lands as their own masters instead of as hired men. In the Gold Coast for example agricultural departments have been established with trained travelling officials whose duty it is to teach the most efficient means of cultivation. In this way there is being established a self-reliant peasantry which will become the backbone of the country and serve as a counterpoise to the sometimes highly educated native clerical class that has been developed in the cities and especially in Sierra Leone, the Gold Coast and Senegal.

Stability of Political Life

Members of the clerical class act as lawyers, doctors and ministers of religion and occupy posts in the civil service. By reason of their better education they are the political leaders of the people except in those districts where the authority of the paramount chiefs is still respected and upheld. With a peasantry secure in its possessions stability is being introduced into the political life and the two classes are



BUSY TERMINUS OF THE GOLD COAST RAILWAY ON THE QUAYSIDE AT THE PORT OF SEKONDI

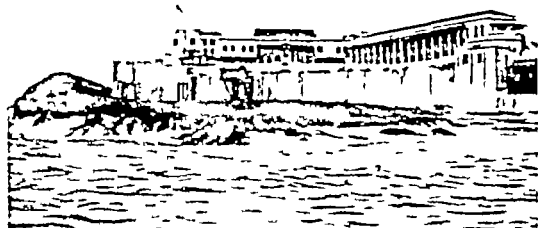
Sekondi, lying between Dixcove and Cape Coast Castle, is the principal port of the colony, though there is no sheltered harbour, only piers provided with cranes at the landing stage, but a deep water harbour is being constructed at Takoradi about five miles away. The town is one of the old trading posts of the Guinea Coast. Fort Orange having been built by the Dutch in 1649, but it was of comparatively small importance until the sea terminus of the railway to the gold mining districts and Kumasi was established here. The exports include cocoa, gold, manganese ore, rubber and timber.

likely to work together in close co-operation for the common welfare.

There are of course many industries in a complex society like that of West Africa such as native carpentry, blacksmithing, working in metal and weaving, and taken as a whole the stage of civilization is much higher than that which exists in Central or La term Africa.

The development of Guinea is being accomplished primarily by means of railways. Although motor transport is used

The French however have elaborated a great plan of railway communication from west to east throughout their colonies in order to bring the central and western Sudanese districts into direct contact with the ports of Dakar and Konakry and by means of north to south branch lines with the ports of Grand Bassam just south of Bingerville the capital of the Ivory Coast and Kotonou in Dahomey. Thus the produce of the central portion of the French



CAPE COAST CASTLE ON ITS JUTTING MASS OF SEA WASHED ROCK

Cape Coast, the westernmost of the British colonies in West Africa, lies about 50 miles west of Accra. It is an important port for the export of cocoa beans, palm oil, and other products. It was the chief port for the export of slaves to the West Indies and America in the 18th and 19th centuries. The castle was built in 1682 by the British and is one of the best preserved of the many castles built by the Europeans on the coast of West Africa.

extensively in the Northern Territories of the Gold Coast and Ashanti as well as in considerable areas in the French colonies its main function is for passenger traffic and to bring produce to the railways from districts far from the coasts. It will never be able to compete successfully with railway communication. In this respect it differs from communication by means of waterways which as a general rule wherever they can be utilized, are of service as a means of direct communication between the interior and the coastal ports. The present system of railways is designed to bring the produce of the interior to the nearest ports and no attempt has been made to join the colonies by communications along the great northern plateaux.

Sudan may be brought to the shores of the Gulf of Guinea.

The French have built a railway from Dakar to Kayes and Ambakédi on the Senegal river and thence to Bamako and Kulkoro on the Niger in order to secure their communications with Timbuktu and the Sahara and from Konakry in French Guinea to Kankan on the Milo branch of the Niger so as to open a way to the more southerly regions of the French Sudan.

Another line runs from the Dakar-Kayes railway parallel with the coast to the port of St. Louis at the mouth of the Senegal. In the Ivory Coast a railway runs from Abidjan on the lagoon close to Grand Bassam northwards to Katioba. In Togoland the French have

taken over the German railways running northwards, and in the adjacent colony of Dahomey they have built a line from the port of Kotonu to Savé, a town in the interior, and joined the various small coastal ports with Porto Novo from which a small line also runs northwards. Two railways were already built by the Germans from the port of Duala, a magnificent harbour on the Cameroon estuary, destined to become the outlet not only for the greater part of Cameroon but also for the French Equatorial African colonies.

So far as the British West African railways are concerned, they have been built primarily for economic purposes and in most cases construction has proceeded upon entirely practical lines. The three principal colonies thus possess systems that are of considerable utility and importance. Nevertheless there has been a lack of foresight and cooperation between the different colonies. Sierra Leone has railways built on a narrow gauge, so that if in the future through communication between Freetown and the French Sudan, and across the Sahara to Algeria, should become politically and economically practicable, the existing line would have to be entirely reconstructed. The importance of Freetown as a port of entry on the world-routes of the future, owing to its proximity to

the South American coasts, needs no special demonstration.

In the Gold Coast there are two main lines running respectively from the port of Sekondi to the gold-fields and Kumasi, the capital of Ashanti, and from Accra northwards through the plantation regions in the east of the colony.

In considering the trade of Guinea it is necessary to remember that the greater part of the exported produce is carried to Europe, mainly Great Britain and France, although there have been certain developments in connexion with the extension of trade with Canada. There are direct steamship lines running from Liverpool and Marseilles to the principal Guinea ports. Until comparatively recently trading in the up-country districts was largely carried on through the medium of gin and other trade-spirits, but measures have been adopted to check and reduce a traffic so detrimental to the welfare of the natives.

Apart from the coastal cities which have been developed mainly by the growth in commerce, the native population of Guinea is distributed throughout numerous large villages, these villages are generally the centres of native tribes and the capitals of local chieftains. In the Gold Coast, however, Kumasi is a considerable city with a small European population.

GUINEA LANDS GEOGRAPHICAL SUMMARY

Natural Division. The coastal lowlands and the edge of the African plateau along the shores of the Gulf of Guinea. Familiarly known as West Africa, the coastal sill is narrower than, though in other physical respects—deltas, coastal lagoons swamps, etc—similar to, that of East Africa. Inland lies the great natural region of the Sudan, and the political units of the Guinea Lands extend in varying degrees into the Sudan (q v).

Climate and Vegetation. Tropical rains reach a maximum exceeding 350 inches annually. Tropical temperatures about 80° F, with slight variations. Land and sea breezes of local origin are important factors in the climate as it affects white sojourners. Mangrove swamps and forest line the coast, and a belt of tropical forest (cf the Congo) lies along the plateau edge.

Products. Cultivation is limited to

clearings and the forest supplies the principal products—mahogany, ebony, ground-nuts, bamboo, coconuts, rubber, cacao and palm-oil. Gold, coal and manganese are mined.

Communications. Lagoons and water courses serve for local transport. While railways running, in the main, into the Sudan from coastal termini serve the purposes of Europeans, these railways, at present individual, will probably be joined by cross-connexions (cf Queensland, Australia).

Outlook. Relatively a handful of white traders, officials and engineers has established a peaceful and ordered regime in the interests of the exploitation of the forest resources. Settled government and effective continued training of the numerous natives march hand-in-hand with economic progress and development.

HAMBURG

Greatest Port of Continental Europe

by W. H. Dawson

Author of "The History of Modern Germany"

THE ancient Hanseatic city of Hamburg is a free city and independent at a distance from Germany. It is situated on the lower Elbe some 17 miles distant from the river mouth on the North Sea and is contiguous to the Prussian provinces of Hanover and Sleswig-Holstein. It is the largest and most important seaport in the Continent, the hub of export of foreign trade it takes behind London, Glasgow and Liverpool and in population behind the first two of these cities. For all but administrative purposes the large Prussian town of Altona forms part of the city of which it is merely a part of the town.

A considerable artificial water fall within the rate of which the city is situated at a rate of 12 square miles. This is divided into the city proper with a population in 1900 of 194,000 and the rural district with a population of 14,000. The extra-mural territory follows the river to the coast in a narrow corridor which culminates at Cuxhaven.

City Battle with the Swamps

Much of the land is marshy for it lies but little above normal high water mark and not more than 60 feet above the sea level with the result that in spite of the protection afforded by dykes flooding is common. In the interest of sanitation a matter to which the city fathers of Hamburg have attached the greatest importance since the devastating cholera epidemic of 1892 which cost nearly eight thousand lives the stagnant water of the swamps is systematically pumped out.

Hamburg's population is overwhelmingly Protestant but as might be

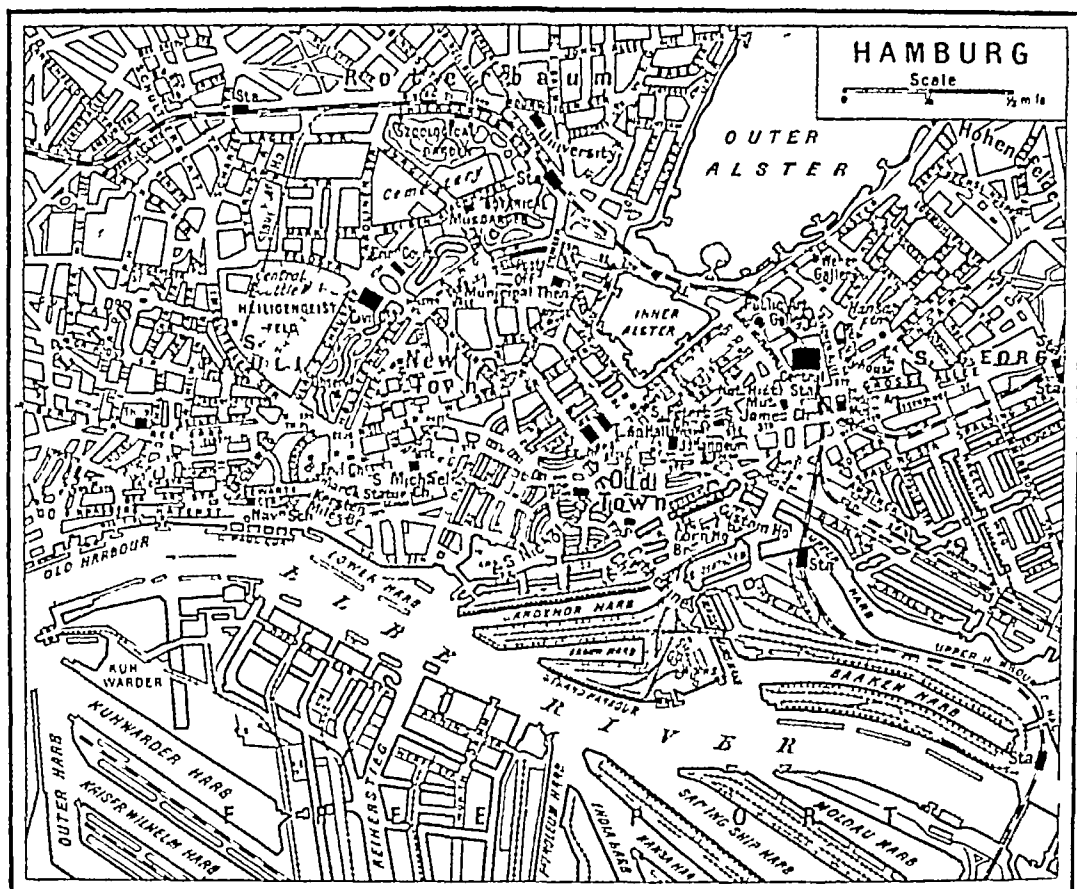
expected in a city almost exclusively occupied in commercial pursuits the Jewish race is well represented. There is always been a strong foreign element the proportion before the Great War being about the per cent or two the ratio for Germany. The alien element from Britain is a large contribution apart from the families of British birth which had in course of time been naturalised.

City of No Free City

The history of Hamburg may justly claim to be one of no mean city. It is a city as old as the time of Christ when it is believed to be the first or which it independent port. It is a member of the Hanseatic League dating from 1255. It is self contained and a claim to itself in a way that perhaps no other German town can be said to be.

Though rightly spoken of as situated on the Elbe Hamburg's exact position is at the junction with that river of the two tributary streams, the Alster and Bille and the greater part of the city is in fact built on the Alster. What is known as "inner" Hamburg the oldest survival of the original river settlement is divided into the Old Town and the New Town but extending west and north of the New Town are the parishes of St. Pauli and St. Georg with some twenty other district many incorporated within recent years lying on both banks of the Alster.

As in the case of most ancient towns whose growth has been constricted by natural obstacles and the existence of fortifications the older streets of



MAZE OF HAMBURG DOCKS AND BASINS LINING THE ELBE

Hamburg are predominantly narrow and crooked, beginning anywhere and ending nowhere in particular, but space, light and air are being increasingly admitted into confined and murky places. Whole quarters of the old city have been demolished and replaced by well built streets, and wherever working class populations were dislodged efforts were made to provide for their future habitation, if not on the old site, as near to their workplaces as possible. There has also been much replacement of old property by new in the business and residential districts. Handsome buildings have sprung up in all directions, fine avenues have been laid out, and large gardens and other open spaces have been set aside for public use, while on the periphery spacious parks have been provided.

Old tradition, the convenience of commerce and the regulations incidental to modern town-planning have so ar-

ranged that the docks, great warehouses, ship-building yards and factories are mostly located on and about the river banks in the southern part of the city area and in the Hammerbrook quarter to the east, a large part of which is practically given up to factories and workshops of all kinds, though the large works are more and more found in the suburban districts.

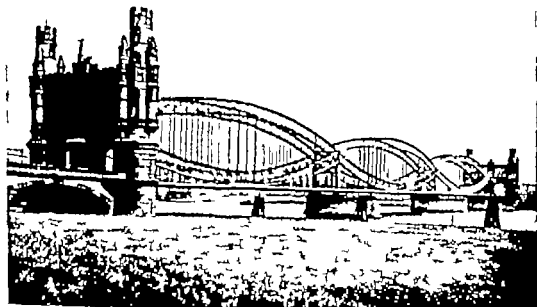
For, as is the case with Liverpool or Cardiff, Hamburg's prosperity has been built upon a multitude of industries supplementary to its shipping trade, chief among them are ship-building, iron founding, machine works, rubber, chemical, glass-blowing, piano, jute, wool-combing, margarine, biscuit and chocolate manufactories, sugar and spirit refineries, corn, rice and oil mills, and an important clothing trade. The working classes congregate in the crowded quarters of the Old and New Towns, particularly in the neighbourhood

of the harbours and in the populous districts lying to the east and south-east of the city proper

The busiest centre of traffic and trade however is the S Pauli quarter. Here converge all the arteries of the city's cardiac system. Here the Elbe steamers arrive and depart. Here consort the seafaring population and are found the agencies of all kinds good and bad which minister to its needs and pleasures. From the S Pauli quay in summer time a constant stream of pleasure-seekers, passing to and fro witnesses to the allurements of the many water excursions for which enterprising steam-launch owners cater. One of the most popular has always been the delightful sail down the river to Blankenese which is charmingly situated on the right bank.

Mention has been made of the river Alster. This tributary small though it is, plays an important part in the life of Hamburg. In olden times the Alster simply emptied its waters into the main

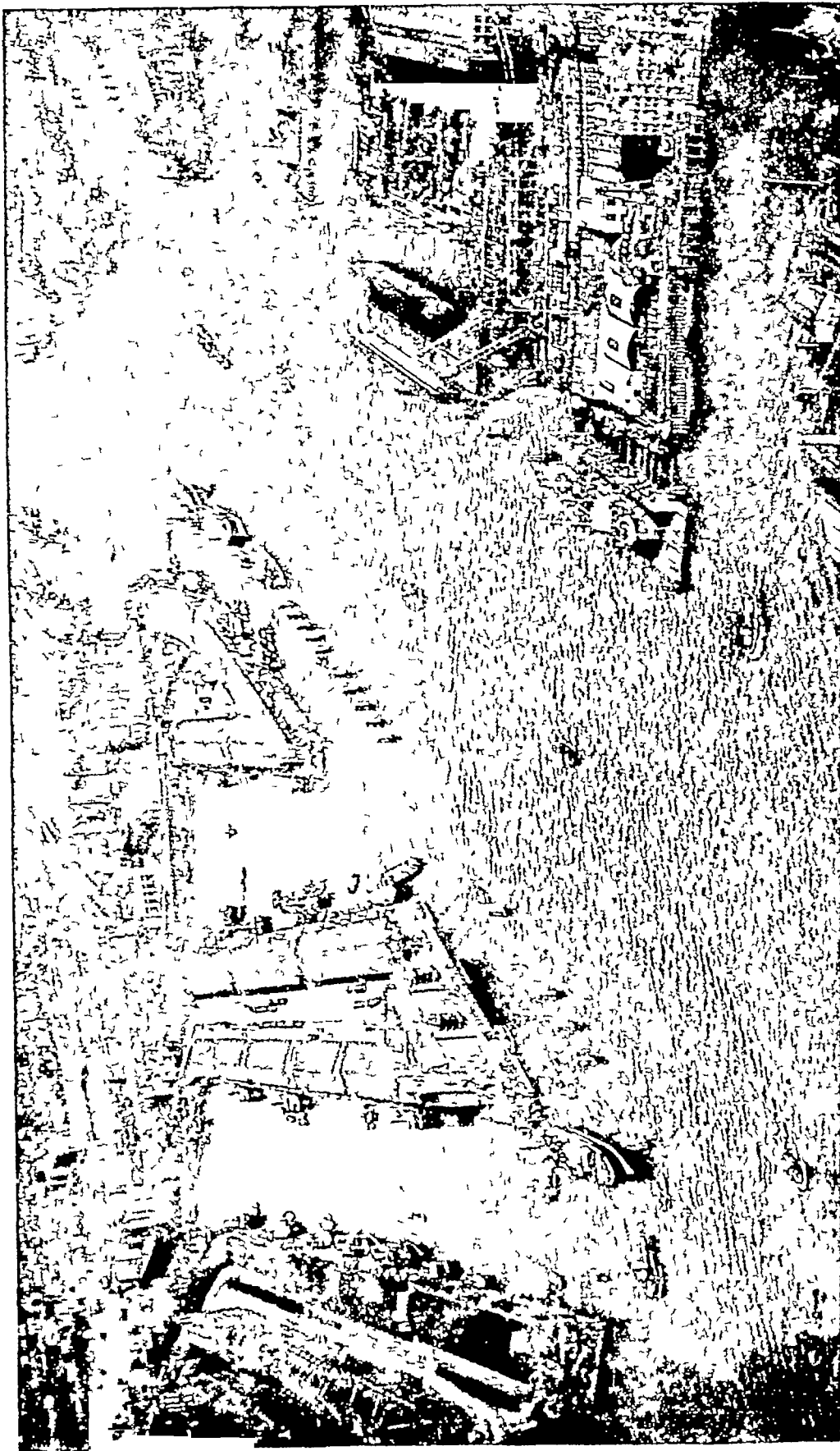
stream in the eastern part of the city but by means of dams and locks the lower reach of the river has been converted into two handsome sheets of water the larger called Outer Alster and the smaller Inner Alster. The lakes are separated by the fine and substantial Lombards Bridge which carries the Hamburg Altona line of railway a wide carriage road and a footpath for passenger traffic. The banks of the Inner Alster which used to be a fashionable residential quarter are now given over to hotels banks and offices and Society has migrated to the Outer Alster which is lined by the villas of the well-to-do patrician and commercial families. Among the more select residential districts in this locality are Uhlenhorst Harvestehude and Eppendorf. Nevertheless the three sides of the Inner Alster the Old Jungfernstieg the Alsterdamm and the New Jungfernstieg continue to be favourite promenades as of old.



NEW ELBE BRIDGE ABOVE HAMBURG'S FREE HARBOUR

About 350 yards east of the triple-arched iron railway bridge, which is just visible in the photograph, is this magnificent bridge, completed in 1888 for vehicles and foot passengers. Hamburg has a very well developed system of communication, for besides the metropolitan railway there is an excellent service of electric trams to the adjacent suburbs and steamboats ply up and down the river

Underwood



Aerodina

DOCKS AND QUAYS LINING THE BANKS OF THE ELBE AND THE FREE HARBOUR ON THE RIGHT

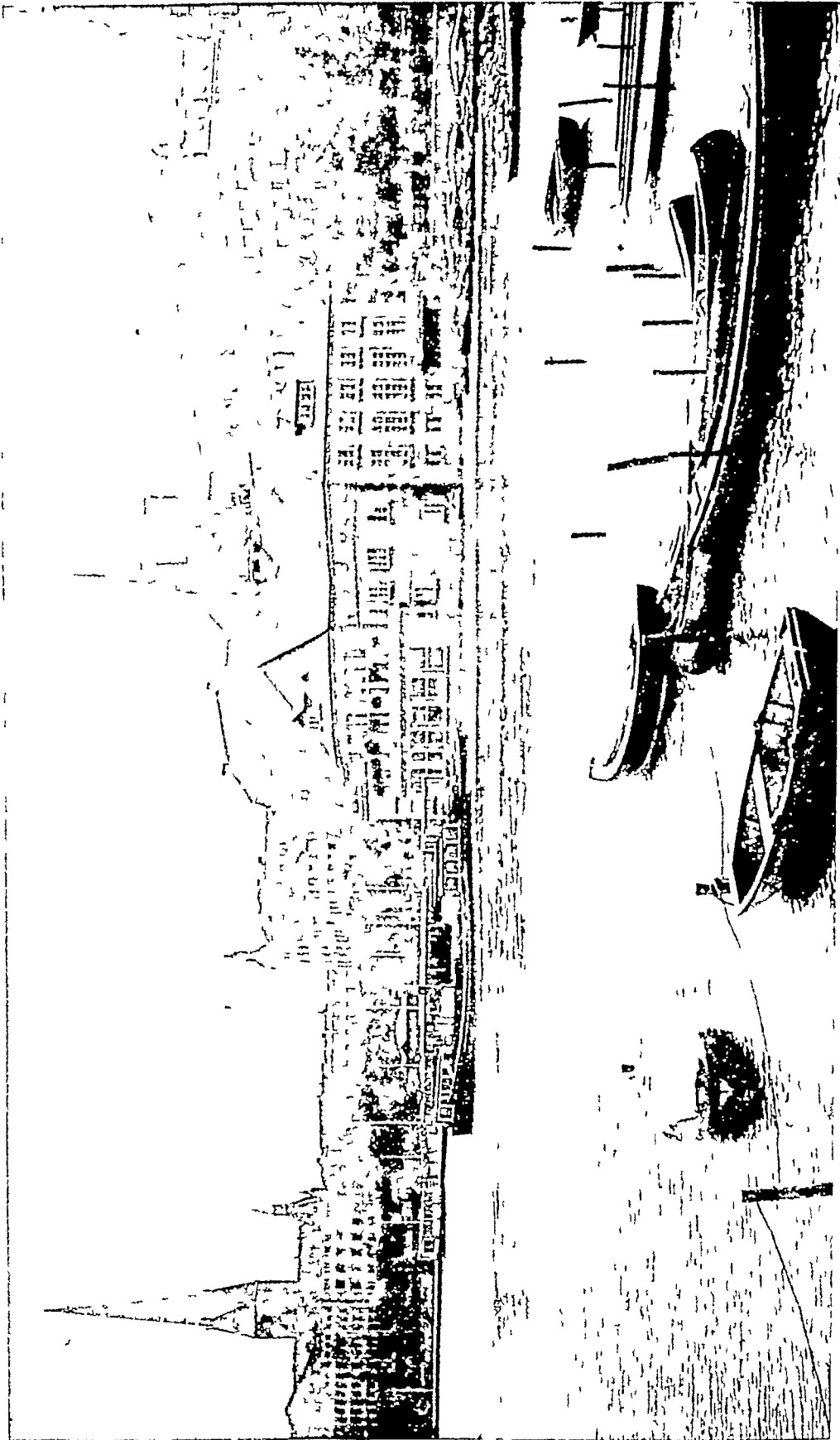
On the Elbe is an enormous extent of docks, shipyards, huge granaries and emigrant sheds, the greater part of which forms the Free Harbour which receives goods for transit trade. Hamburg handles a large proportion of the exports and imports not only of Germany but of Central Europe, while ship building is the chief industry and spirits, beer casks, chemicals and furniture are amongst the articles produced. A tunnel which passes under the river giving access to the districts on the left bank where are most of the docks, ship building yards and engineering works was opened in 1911.



Aerial

INNER HARBOUR AND THE ZOLL CANAL ENCIRCLING THE CLOSELY HUDDLED OLD TOWN

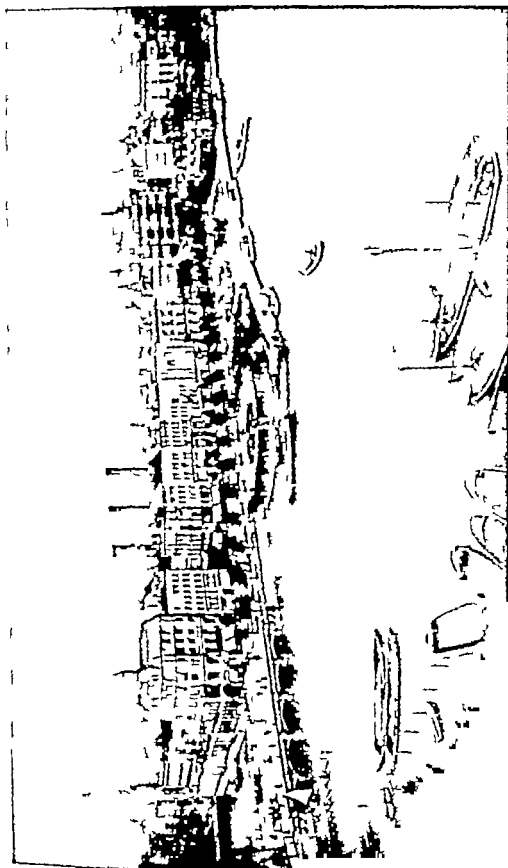
On the left of the photograph is the Rödtenmarkt with the high level railway running down the middle to the centre is the church of St. Nicholas one of the highest buildings in Europe, being 455 feet high and very great in the rich Gothic style the market square is paved with slabs of stone and the interior work on the sacristy door are especially beautiful. Farther to the right upon the Binnen Alster that borders the Zoll Canal is the new church, founded in the thirteenth century though the present edifice only dates from the seventeenth, containing some of the most important and Renaissance tombstones.



LANDING STAGE AND PLEASURE CRAFT ON THE INNER ALSTER, HAMBURG'S GREATEST ATTRACTION

Hamburg has an Old Town and a New Town, formerly divided by the river Alster which has been closed to form two lakes, the Inner and the Outer Alster, separated by the Lombards Bridge and the remains of old fortifications. The Inner Alster is used chiefly for pleasure, small steamers plying regularly up and down, and is bounded by quays planted with trees and flanked with palatial hotels, business houses and private dwellings. The banks of the Outer Alster are sprinkled with country houses, gardens and parks, one of the favourite points being the Uhlenhorst

Underwood



LOOKING ACROSS THE INNER ALSTER TOWARDS THE JUNGFERNSTIEG AND REESEENDAMM BRIDGE

Along the southern extremity of the Inner Alster is the Jungfernstieg, the centre of the fashionable life of Hamburg with its shops, restaurants and hotels, while leading from this quarter are the principal business streets, such as the Grosse Burchenstrasse and Neuer Wall. The latter is the heart of the city including the commercial area. This accounts, in some measure, for its thorough modernisation and the almost complete absence of relics of the past, though in a few streets there are still some handsome residences of Hamburg worth a visit of the serious and discerning connoisseur.

The effect of the junction of the Alster with the Elbe is the formation within the centre of the city of a number of canals and inlets known as "fleets" (cf Fleet Street in London), reminding one of Rotterdam and other Dutch towns. These canals are connected with the main river by means of locks, so that goods can be conveyed to and from the warehouses, often rising to a great height, which line their banks.

Muddy "Fleets" in Flood

Many of the oldest and also most dilapidated houses in the city are found alongside of the "fleets," and in them the poorer classes are herded together amid very unhomelike conditions. At times some of the "fleets" can be crossed dry-shod, though not mud-free, but when the tide runs high up the estuary they are flooded far above the normal level, with the result that the low-lying portions of the adjacent buildings are inundated.

It is customary for three shots to be fired from the Marine Observatory on the high-level road overlooking the river, known as the Stintfang, as soon as high tide is telegraphed from Cuxhaven, by way of warning to all and sundry. Should the incoming waters threaten danger, the signal is repeated for the special benefit of the "fleet" population, on which the menaced inhabitants make a hurried exit from their dwellings, removing as much of their goods as possible to safer quarters. That the sanitary state of these buildings leaves much to be desired will readily be understood, though Hamburg would lose much of its charm for the artist and archaeologist if these odd corners were absent.

The Slums, Inside and Out

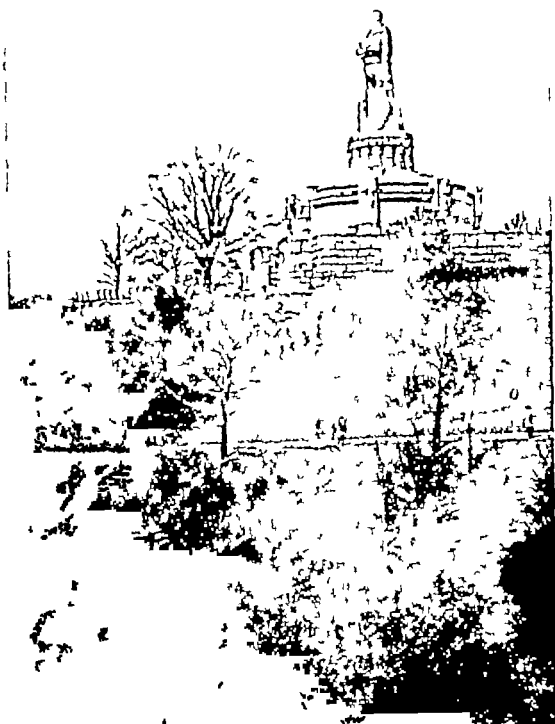
The worst modern slums are the courts and wynds — euphemistically called "Terraces" or "Passages" — of the Old Town, where back-to-back houses in all stages of dilapidation abound. They, too, look picturesque enough from without, but the conditions within often defy description.

Hamburg people in the past had plenty of money, and both collectively and individually they were not slow to invest it in the creation of a pleasant environment and of amenities of many kinds which may prove not the least potent sources of solace in their present unhappy plight. Proverbial phrase speaks unkindly of the "Hamburg money-bags." Money-making has certainly been Hamburg's most profitable industry, and money-pride and the plutocratic spirit have been conspicuous in the past.

Devastation of the Great Fire

Yet a generous sacrifice for the public good has always distinguished the Hamburgers, and their public buildings alone prove it. Some of the oldest of these were destroyed by the great fire of 1842, but they have many worthy successors. Among the finest are the new town-hall, an edifice of the sort which delighted the ex-Emperor's eye and heart, since its façade is ornamented with twenty statues in copper of German emperors and its 360-foot-high tower is crowned by the imperial eagle, the German Playhouse, the Public Art Gallery, the Museum of Natural History, the huge Central Railway Station, and the Exchange, all near the Inner Alster, while the Museum of Industrial Art and the Courts of Justice, civil and criminal, are not far away. The more notable commercial buildings include the central offices of the Hamburg-American Shipping Company and the Imperial Bank, though, as in other German towns, most of the company banks are also quartered in imposing blocks. There are artistic ornamental fountains in several of the public squares, but they are of quite modern date.

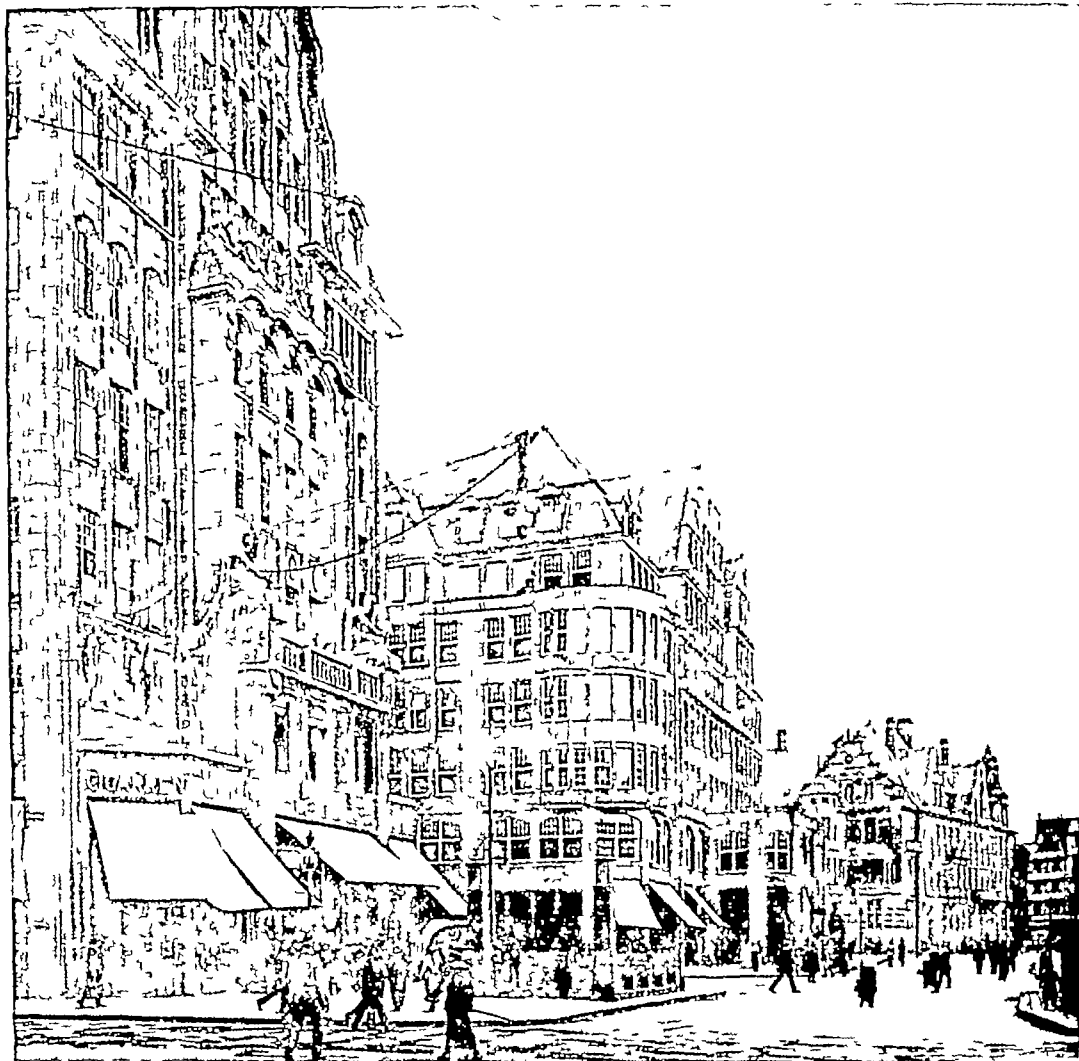
The city is not specially rich in ecclesiastical buildings. The oldest and most interesting of the churches is that of S. James, of which the earliest surviving parts date from the fourteenth century, though the tower is not more than a century old. Other early churches



L. Schaefer

STRIKING MONUMENT OF PRINCE BISMARCK ON THE MUEHLBERG

in the suburb of S. Pauli rises this statue by Lederer and Schandt, an enormous figure of the chancellor Bismarck on pedestal embellished with reliefs. S. Pauli, the suburb adjoining Hamburg on the west, is principally frequented by sailors and below the Sailors' Home are the landing stages for the steamers to Cuxhaven and the summer resorts of the North Sea.



E N A

SPLENDID SHOPS AND OFFICES IN THE MOENCKEBERG STRASSE

From the Rathausplatz the Mönckeberg Strasse runs almost due east to the Central Station and on its north side is the Barkhof, a group of offices built in 1909, in one of the inner courts of which is a statue of Heine by Hasselriis. The rather ornate Rathaus, in the Rathausplatz, is an imposing building in the German Renaissance style, surmounted by a tower 370 feet high.

of note, like that of S. Peter's, were destroyed or suffered by the great fire, though some of them have been replaced. S. Nicholas is one of the rebuilt churches, and it is noteworthy that it was designed, in the Early Gothic style characteristic of most of the Hamburg churches, by Sir Gilbert Scott, the nineteenth century architect.

The existing church of S. Catherine's for the most part dates only from the seventeenth century, that of S. Michael's from the eighteenth, and the present S. Peter's Church was built in the middle of last century. Characteristic of the larger Hamburg churches are their

towers, several of which are between 400 and 500 feet high, the highest being that of S. Nicholas in the very heart of the Old Town.

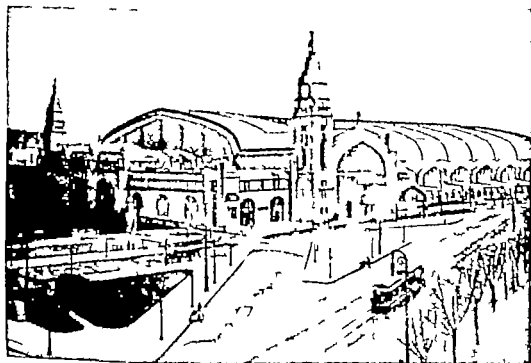
The traffic to and fro over Hamburg's many waterways of all sorts and sizes is facilitated by more than a hundred bridges, and some of these are fine and even monumental structures. The largest and most pretentious is the Lombards Bridge, whose northern entrance, surmounted by towers and castellated masonry, is an imposing piece of architecture, though the emphasis given to mass at the expense of form may not please a fastidious taste. Other notable

bridges are the Kersten Miles Bridge decorated with statues of prominent Hamburg seafarers and the Corn House Bridge near St Catherine's church.

For a town of such a pronounced commercial character Hamburg can claim exceptional literary, artistic and scientific associations. Heine and Brahms were born there and Lessing and Klopstock lived for a time there. Lessing doing much for the advancement of the local stage. The Public Art Gallery has already been mentioned. Under the directorship of the enthusiast Lichtwark this institution specialised in Hamburg art and paintings of which Hamburg was the subject and a unique collection of works of the kind has been got together. A specially interesting part of the collection is formed by the groups of paintings by Bertram of the fourteenth and Franke of the fifteenth century but there are also many works of no little distinction by various Dutch and modern German and English painters.

There are many public monuments of sorts though here Hamburg cannot be said to excel. It has no such old and beautiful work of art as adorn the squares of some South German towns and its statues (of Schiller, Brahms and other) and the inevitable Kaiser Wilhelm monument are uninspiring. Of the gigantic Bismarck statue overlooking the Elbe all that need be said is that a Abraham Lincoln once remarked those who like that sort of thing will find it just the sort of thing they will like.

The city has many scientific institutions. Besides the Natural History Museum there are botanical and ethnological museums, an observatory, botanical and zoological garden and museum of prehistory and Hamburg antiquities. There used to be several interesting scientific collections in private hands like the Godeffroy museum and the zoological collections of the Hagelwicks that achieved international fame.



HUGE CENTRAL RAILWAY STATION IN THE CITY OF HAMBURG

Hamburg Central Station, by the Stein Tor, is situated between the Klosterhof Station and the Lombards Bridge, the metropolitan railway runs between this station and the Altona terminus. Hamburg, one of the first members of the Hanseatic League, is still Free City and the capital of a little state within the German Republic, besides being one of the greatest ports in the world.

For many years Hamburg had cherished the ambition to have a university of its own, like so many other old German towns far smaller and less wealthy. It already possessed, besides its gymnasia and other higher schools, a colonial institute which is accommodated in the Lecture Building, physical and chemical laboratories and good public libraries. Now the existing centres of learning, so far as suitable, have been incorporated in a fully-organized teaching university, which began its career under very favourable auspices before the economic collapse of Germany occurred after the disorganization that followed hard on the end of the Great War.

Investments in Public Health

Hamburg has also invested money freely in public health, and its hospitals do it infinite credit. Of these the great institution at Eppendorf is famous throughout the whole country. The city graveyards having long ago been closed, it also led the way in Germany in providing municipal cemeteries. The beautiful park-like cemetery at Ohlsdorf is as unlike the typical burial ground as possible and has been imitated by many other large municipalities.

The dominant spirit of Hamburg is the spirit of work and enterprise. No one would speak of its population as pleasure-loving in the sense and measure in which the phrase would faithfully apply, for example, to the Rhinelanders. Being of Low German stock, its people are of a somewhat heavy and phlegmatic temperament, they are inclined to be stiff and solemn in manner, and they may almost be said, without exaggeration, to take their pleasures sadly.

Two Wet Days for One Dry

A predominantly cool temperature and an exceptionally large proportion of rainy days—two out of three is probably under the proportion—do not favour outdoor enjoyment, though regattas, sailing on the river and boating on the Alster Lakes have plenty

of devotees in summer. Hamburgers are, however, a sociable people, as is shown by the fact that the number of clubs is very large.

The Hamburgers are devoted theatre-goers, herein sharing the universal characteristic of Germans, who in late years have kept up their theatres and opera houses when many other wonted sources of edification and pleasure had to be abandoned. There are at least a dozen theatres of all kinds, several accommodating nearly 2,000 persons. The oldest is the Municipal Theatre, which gives equal prominence to drama and opera, while the more modern and imposing German Playhouse specialises in drama and comedy. The "variety" and "revue" theatres are also as conspicuous here as elsewhere. The people are not less musical than German people generally, and the town has several large and handsome concert halls and excellent choral and orchestral societies, not to mention a good permanent municipal orchestra.

With all its strong individuality, Hamburg in the past betrayed a marked fondness for England and English customs. English words and phrases have always figured prominently in the German vocabulary of trade and shipping, but Hamburg from time immemorial has adopted the English division of the working day (called by business men "English time").

London Climate and English Games

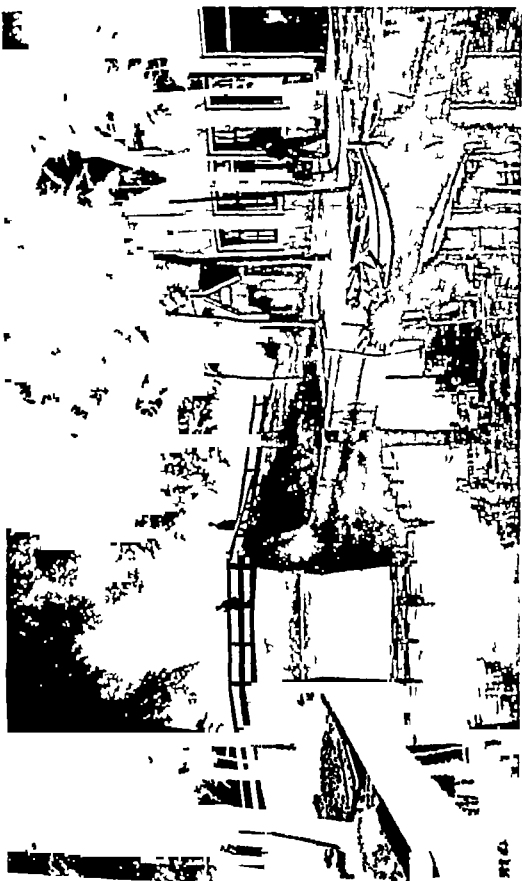
With more dubious taste Hamburg has also appropriated the English climate, for it has an unhappy reputation for fog, rawness and general clamminess during the colder half or three-quarters of the year, with the result that the visitor from London experiences relief and a certain malicious gratitude when he finds that his native city has no monopoly of smoke and grime. Finally, in the winter months football is played in English fashion and in accordance with English rules, and Hamburg's rising youth is very proud of the fact.



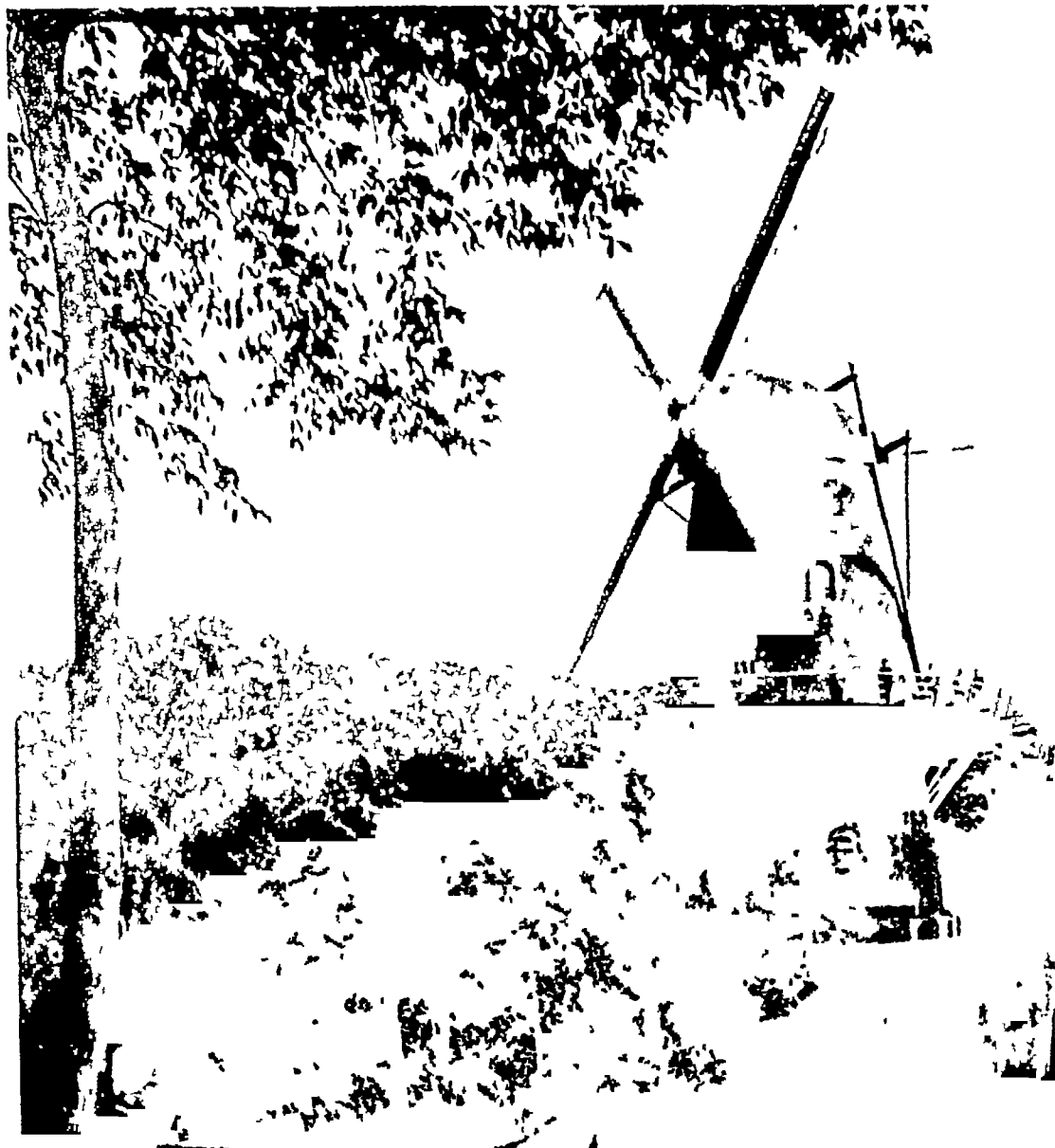
HAMBURG The lofty spire of S. Nicholas Church towers over one of the streams that flow through the city after the fashion of Venice



HAMBURG The Lombards Bridge commands an extensive view of the Outer Alster, its banks studded with villas, and of the Inner Alster with the towers and spires of the mighty city in the background



HOLLAND Still trees and a wooden bridge are mirrored in the tranquil water by the village of Bruck in the
Hollands The little town is noted for the almost exaggerated pillboxiness of its appearance



Donald McLeish

HOLLAND *This giant windmill grinds the corn brought from the farms round Middelburg along the gently flowing canal at its foot*



[Humphrey Jnr.]

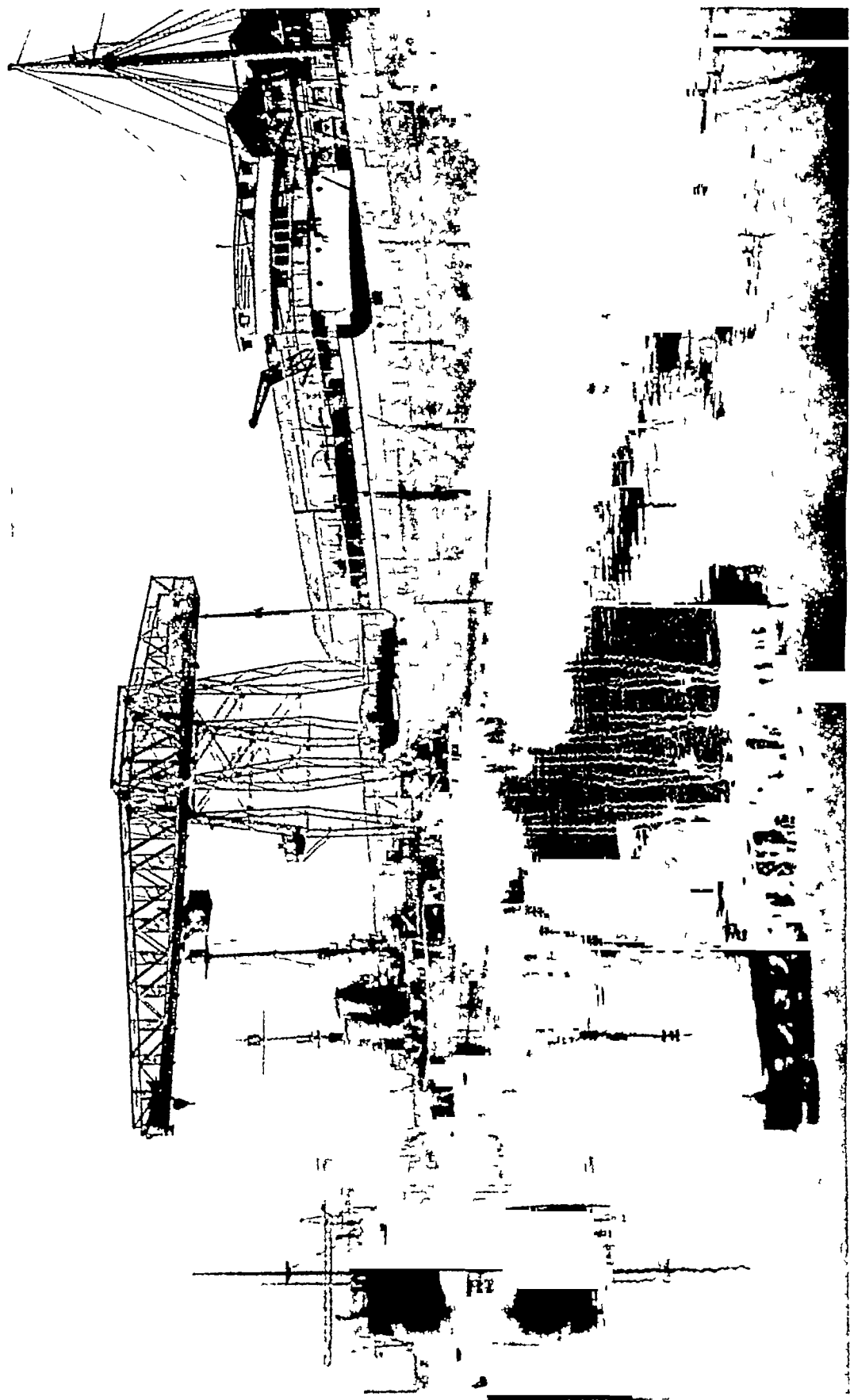
HOLLAND *The handsome tower of the Gothic Groote Kerk at Dordrecht makes a conspicuous landmark in this riverside town*



HOLLAND *In the Lange Straat, the chief street of the historic town of Alkmaar, rises the Stadhuys, a Late Gothic structure of 1507*



HOLLAND On market day the Place before the Weigh House at
Alkmaar is full of cheeses and the gaily painted carts of the peasantry



HOLLAND Flushing, the birthplace of the famous Dutch naval hero Admiral de Ruyter, is a popular summer resort in spite of the great docks and quays built to turn it into a large commercial port

HOLLAND

The Country at War with the Sea

by Pieter Geyl

Professor of Dutch in London University

HOLLAND or the Kingdom of the Netherlands to give the country its correct title is not a definite geographical entity separated from its neighbours by natural frontiers. One might walk from Germany into the north-eastern part of Holland, or from Belgium into one of its southern provinces without ever noticing that one had crossed a frontier if it were not for the white border mark or the Customs officers one would meet.

For Holland has been cut out of the large plain that lies along the North Sea and the Baltic by the accident of historical development. Politically the Netherlands is a fragment of the northern half of the Burgundian state which was created in the fifteenth and sixteenth centuries out of a number of unconnected feudal principalities loosely attached to the German Empire. It attained independence towards the end of the sixteenth century when it threw off the dominion of the King of Spain, the successor to the Burgundian dukes, but at the same time the Dutch people were separated from their co-ethnics and co-linguals, the Flemings of the present kingdom of Belgium. The line of demarcation between them was traced by the sword in the course of the war of independence and it was fixed in 1648 at the peace of Munster.

A Country of Particles

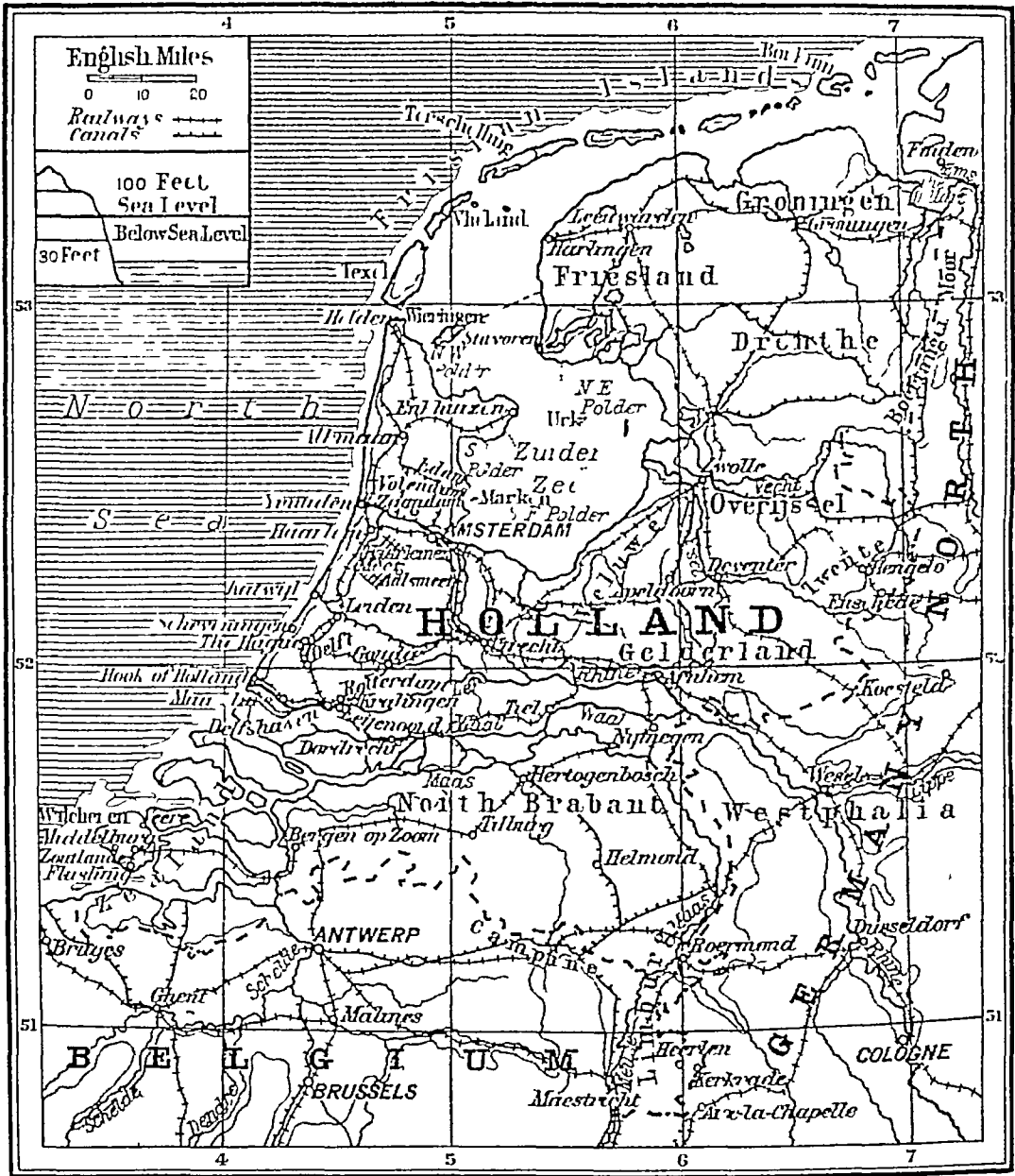
When, after the brief reunion in the Kingdom of the Netherlands, the separation of 1830-39 occurred, a new arrangement was made only for Limburg, Maastricht which had been Dutch since 1632 and which has been an enclave all the time of the "anden regime" was connected with the main portion of Dutch territory.

Yet although the demarcation from its neighbours is not indicated by accidents of the soil Holland does preserve a character of its own. It is the presence of a number of rivers, the lower courses of the Rhine and the Maas (French Meuse) and of the Schelde all of which run into the sea in Dutch territory which determines the country from the geographical point of view. And all these rivers, with their tributaries and affluents forming numerous islands and lakes as well as a considerable stretch of sea border gave the country its typical aspect and contribute so much to distinguish it altogether from its neighbours.

Land Below Sea-level

The Netherlands, the name meaning low country — is remarkable among the countries of the world because of its relatively recent and in parts one might almost say its artificial formation. If the inhabitants had not taken special precautions against the inroads of the sea not less than 38 per cent of the total surface of the country would be flooded with absolute regularity twice every 24 hours. The remaining part of the country is only a few feet above the sea-level and only 2 per cent of the total surface is higher than 150 feet. The highest spot is in the province of Limburg near the German and Belgian frontiers. It is as much as 966 feet above the level of the sea.

It is not difficult to realize that in a country where more than one-third of the total land surface whose area is 12,580 square miles, is kept immune from inundation only by constant effort, after having been wrested in the beginning from the sea the population has received a strong impression from this



ARTERIAL CANALS AND RIVERS IN HOLLAND'S WATER-BOUND PLAIN

struggle that has lasted centuries. And the country itself bears the indelible mark of its origin. Walk anywhere in the province of Zealand, which, except for the exiguous zone of sand-dunes along the sea, belongs altogether to that 38 per cent which is perpetually threatened by inundation, and you will be struck by the remarkable aspect of the landscape. Broad earthen walls, scarcely more than a few feet high, sometimes surmounted by a road, low willows on their slopes and a broad

ditch at the base on either side, divide into unequal patches an absolutely flat country that stretches as far as the eye can reach. Each such patch, or "polder," was covered by the sea at one time. Each earthen wall, or dyke, was once the outer rampart against the sea. Every tide brought in a thin layer of alluvial soil until, along the dyke, a patch had formed, covered only by high tide, so that some weeds began to grow on it. Then a new dyke was laid round it, with much labour and effort

Special arrangements were made for collecting the rain water which was let out into the sea at ebb tide. Turnseed was the only produce cultivated on the newly-acquired soil, until the excess of salt had been drawn from it. And finally, where ten years before the river Scheldt of the North Sea was matter for a few farmers settled down and grew their crops of potatoes, it is at best of flux.

But the inner dyke was not trampled into ad of being a "watcher." It had now become a "keeper." And sometimes it was rudely awakened from its sleep when a breach was made in the outer dyke and the sea destroyed in one night the work of years of reclamation.

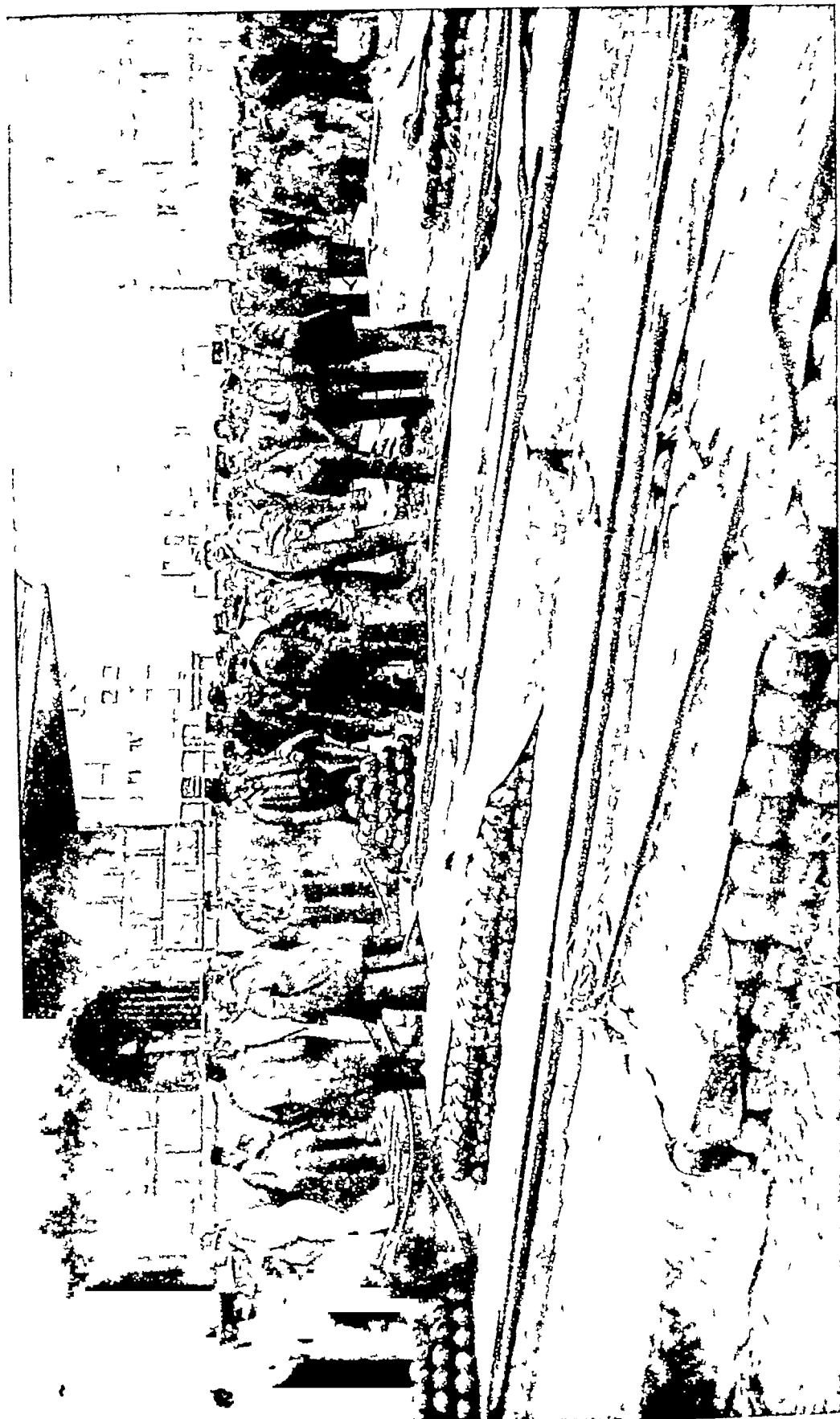
In other parts of the country the same impression of unlimited flatness is created, but in a different manner. A colossal circular canal with a dyke in like it surround a tract of territory that is considerably lower than the surrounding country. These are irregular

patches separated by dykes as in the pebble zone. Here the eye is struck by a more or less symmetrical arrangement of canal with a network of tributaries penetrating every corner of the land like veins in the human body. These territories were all covered with water, but it was the water of lakes not of rivers or part of the sea. And they had to be kept dry by pumps working the windmill in the course of which is process running into a river.

The pumps are still working in order to convey the surplus water into the circular canal. Often they are driven by steam or electric power. But many of the old windmills have been kept and form one of the most characteristic features of the Dutch landscape. These reclaimed lakes are all of Dutch making. Most of them date back to the sixteenth century. The most famous is the Haarlem Meer in the province of North Holland. It was reclaimed from 1548 to 185. Its area is

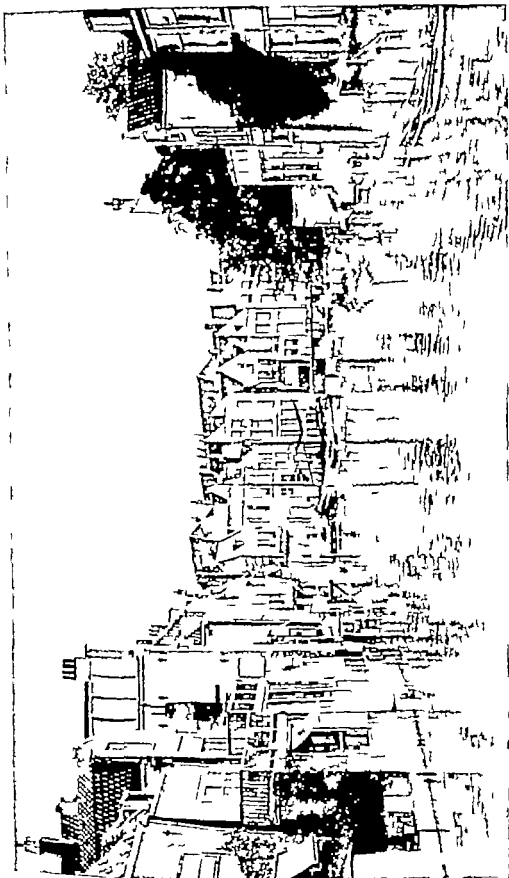


EVERYDAY LIFE ON THE DYKE AT VOLENDAM ON THE ZUIDER ZEE
Facing the little harbour of Volendam are these modest dwellings built on the dyke, behind which lies the quaint town, actually below the level of the sea. Here, in Marken Island, which is situated a few miles south of Volendam, local style of costume is still retained by the small fishing community whose men fashion some of the widest breeches and largest sabots in Holland.



Jewling Galloway

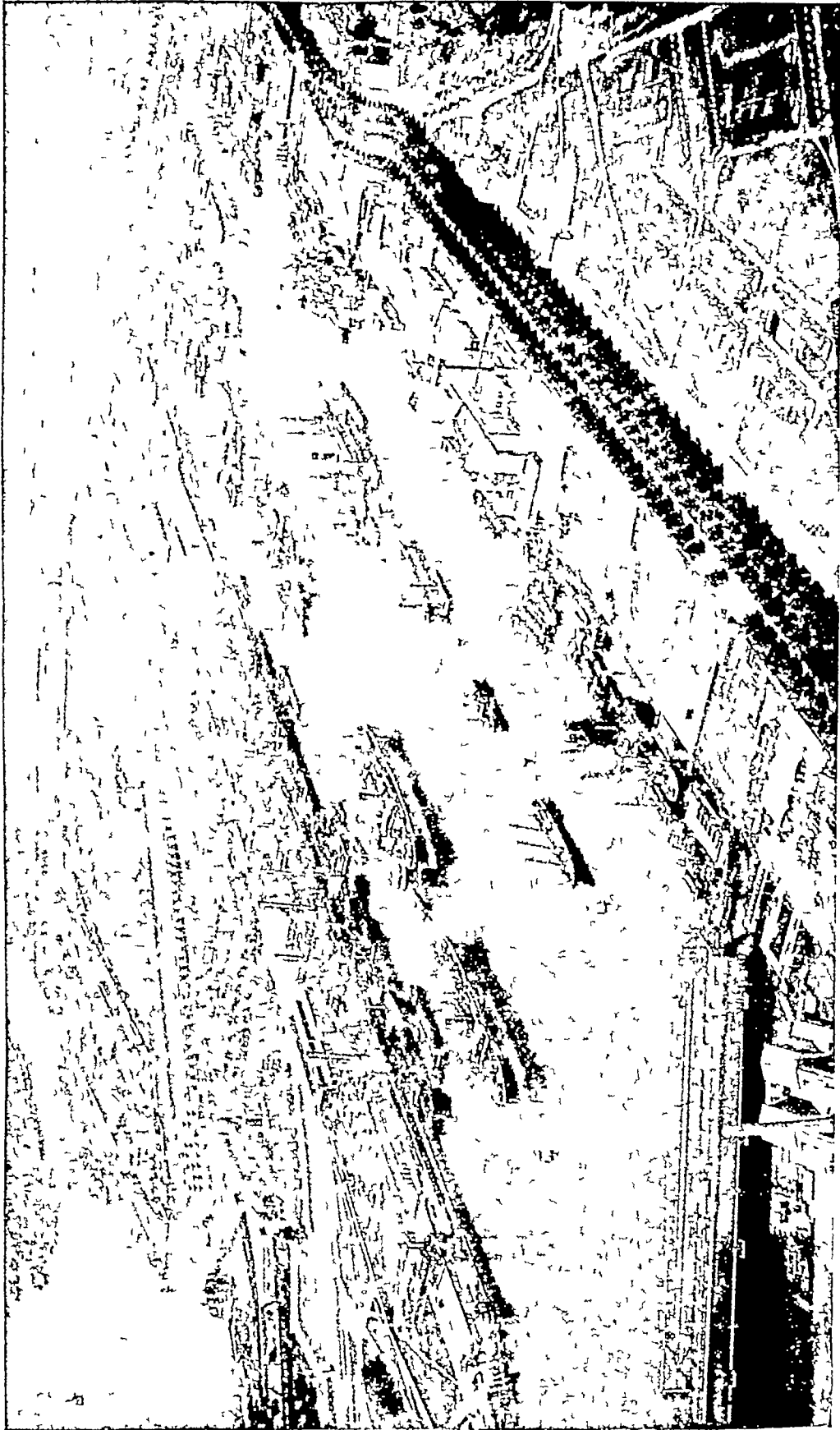
BEFORE THE WEIGH HOUSE OF ALKMAAR, CENTRE OF THE CHEESE TRADE IN THE PROVINCE OF NORTH HOLLAND
 On the North Holland Canal, 20 miles by railway north west of Amsterdam, lies Alkmaar, the chief market for cheese in North Holland. On market days in my tons of cheeses are laid out in piles in the picturesque square before the town weigh house, while the adjoining streets are full of the wagons of the neighbouring peasantry who sell their bell shaped produce to commission merchants and retailers. The greater portion of the milk in North Holland is reserved for the making of butter and cheese. The home industry at the farms, however, has somewhat declined and much of the cheese is now factory made.



Jack Brinkley

CANAL SCENE AT DORDRECHT THE LEADING DUTCH COMMERCIAL CENTRE IN THE MIDDLE AGES

Nearly all the towns of Holland possess a remarkable extent of the appearance and traces of medievalism. Numerous houses of the fifteenth and sixteenth centuries are seen in perfect state of preservation in Dordrecht, river port and railway junction in the province of South Holland. Standing picture-quely on an island a miles south-east of Rotterdam, it has communication with the sea and the Dutch ports is a river—the Meuse and Merwede—and several canals and their parts, with quaint old towns and houses, directly waterways, bridges and roads retain all the characteristics of an old Dutch town.



Royal Dutch Air Service

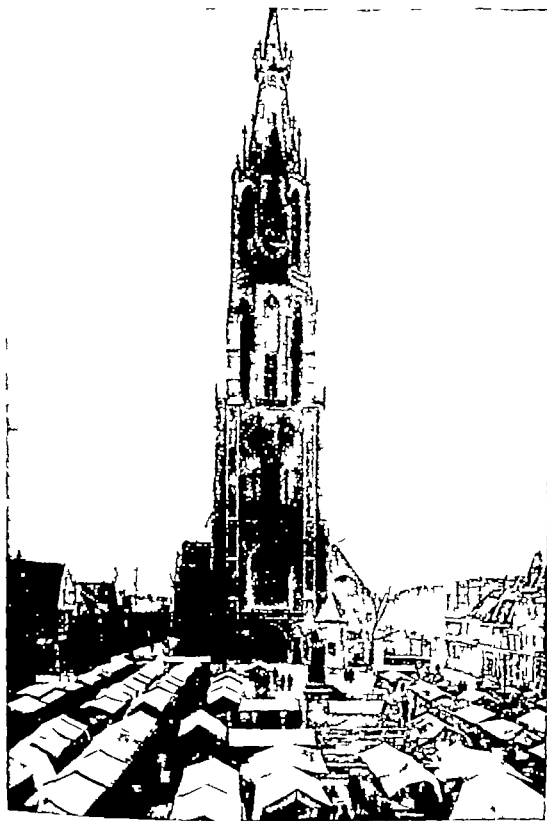
MAAS HARBOUR AT ROTTERDAM, A GREAT COMMERCIAL CITY AND SEAPORT OF HOLLAND

Originally a fishing village, Rotterdam grew into a centre of commerce only after the importance of Bruges—as one of Europe's great marts—had waned. Now it is a great city in which much of the commercial enterprise and wealth of the state is concentrated and has more than half a million inhabitants. Lying on the Maas, or Meuse, it has extensive sea commerce and transit trade, and there are steamship lines running to the Dutch colonies and to America and Africa. Above is the Maashaven on the left bank of the river, which occupies over 140 acres and accommodates the steamers of the Hamburg South American Company.



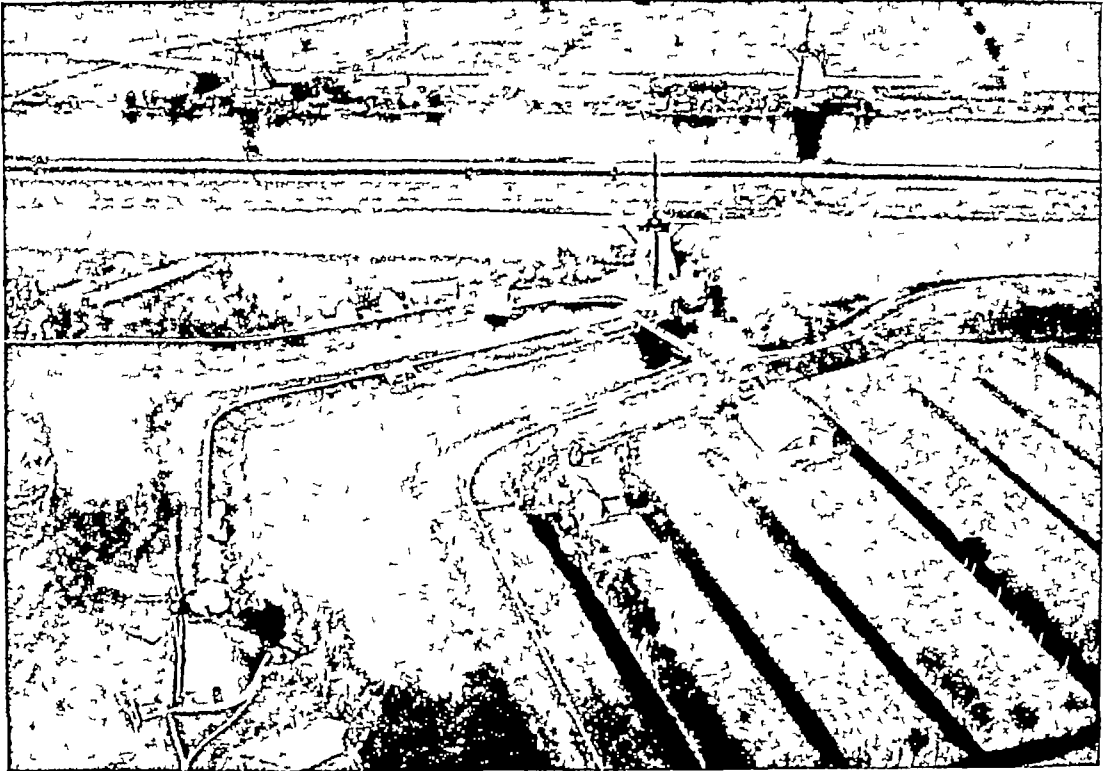
Donald McLeish

OLD-FASHIONED STREET IN THE OLD-FASHIONED TOWN OF FLUSHING
Flushing, or Vlissingen as it is in Dutch lies on the south coast of the island of Walcheren at the mouth of the Schelde. It is the seaport of Holland nearest to England and a line of steamers plies regularly between Queenborough and Flushing. The town has no important trade, but its strategical position ensures it considerable prestige, while as a sea-bathing resort it enjoys some renown.



MARKET DAY IN THE GROOTE MARKT OF OLD DELFT

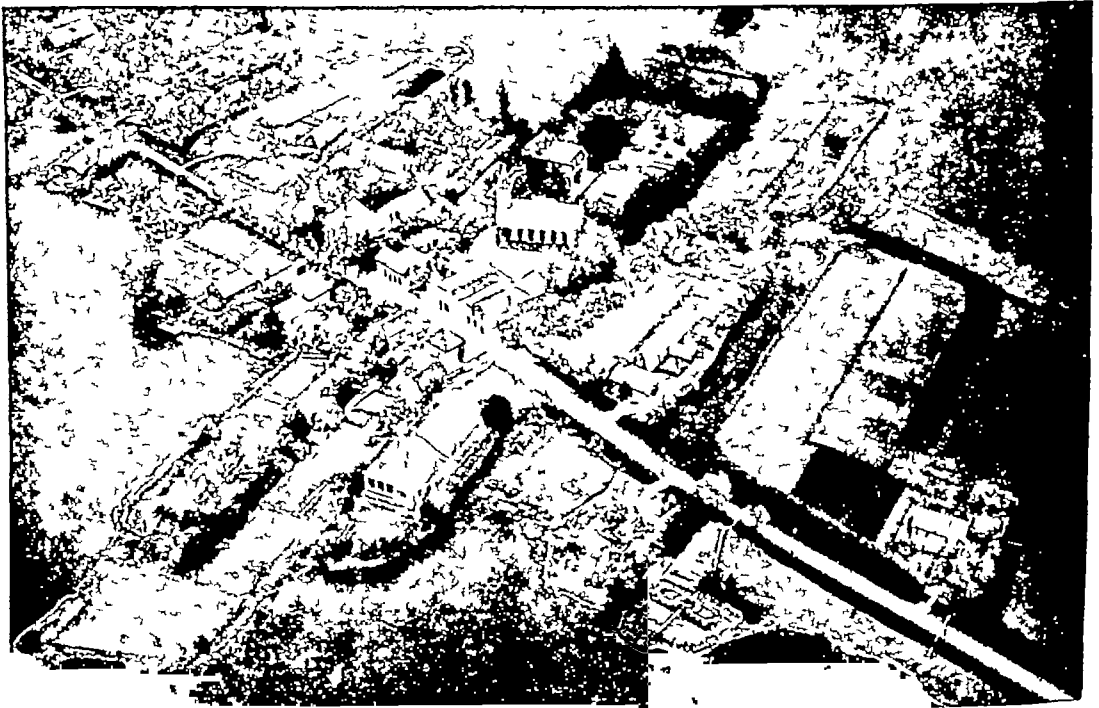
The historic town of Delft, famous for its pottery, contains many fine architectural features. The Nieuwe Kerk, New Church, dedicated to St. Ursula, stands in the Groote Markt and was built in 1396-1496 with a 375 foot tower. The Gothic sanctuary is chiefly noted for the magnificent monument which it contains, erected to the memory of William the Silent by the United Provinces in 1608.



Royal Dutch Air Service

WINDMILLS AND FARMHOUSES ON THE CANALS NEAR SCHIEDAM

By far the greater part of the Netherlands is polderland, a polder being an area surrounded by dykes, the water within which is kept at the requisite level by means of pumping directed by a department called the Waterstaat. Schiedam lies on the Schie, a tributary of the Maas, about three miles west of Rotterdam and is celebrated for the distilling of gin, "Hollands" and "Geneva."



Royal Dutch Air Service

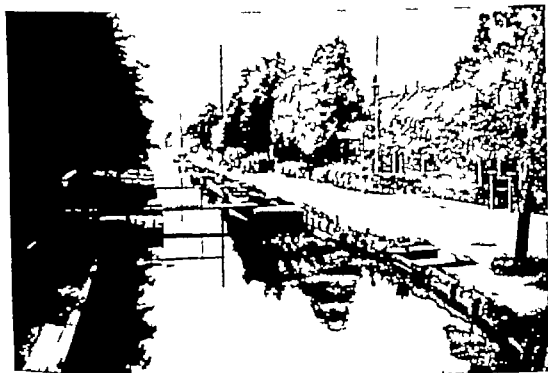
DYKE ROAD TRAVERSING THE WATERY LOWLANDS OF HOLLAND

The country of Holland is chiefly composed of flat, low-lying land, little of which exceeds 16 feet above sea level, while many tracts lie below. In their long struggle with sea and river floods the Hollanders have become wonderfully adept in building defensive earthworks. Here is seen an ingeniously constructed dyke road flanked by cultivated land reclaimed from the surrounding water.



IN THE LAND OF WINDMILLS, WATERWAYS AND WIDE HORIZONS

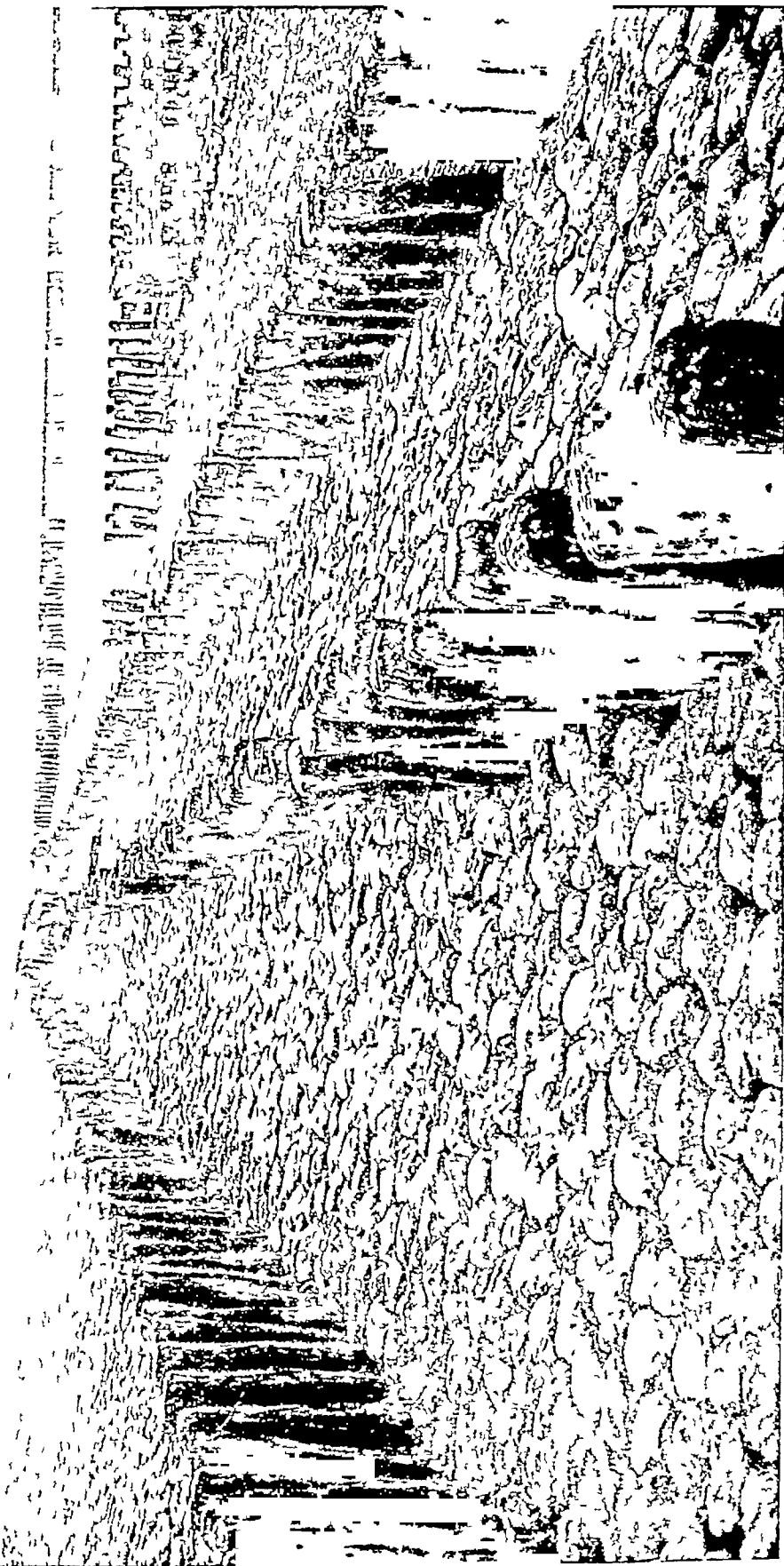
Holland's chief rivers include the Rhine, the Scheldt, the Maas, the Waddenzee, and these connected with each other by a veritable net-work of canal and dike. Swampland, once the outlet of the sea, is now reclaimed and fertile. Windmills are freely dotted about the country. The landscape is a wide expanse of water, with the sky horizon swept by unbroken walls, the water very green in midday, the hills of dunes.



O. Dick or Kees

LANDWAY AND WATERWAY OF A CONVENTIONAL DUTCH VILLAGE

Like the rivers the canals form the main arteries of the national life of Holland and have to be continually kept under control and improved. Through most of the town and villages a canal winds, sometimes side by side with the main street, as here in Aalsmeer which lies about eight miles south-west of Amsterdam, in the province of North Holland and has a population of some 5,000 persons.



GREAT DYKE AT WESTKAPELLE, ISLAND OF WALCHEREN, WHICH PROTECTS THE LOW LAND FROM INUNDATION

The island of Walcheren, in the province of Zealand, lies in the Schelde estuary and is some 13 miles long and 10 miles broad. Its low-lying surface, on which cereals are grown with success and cattle are bred in large numbers, is protected from the encroachments of the sea by dykes. The great dyke at Westkapelle is considered one of the finest things of its kind in the world, innumerable stout wooden piles prevent the large stones from shifting and although the dyke is so solidly constructed as to appear proof against all storms yet time and again it has to be repaired.

are a sight well worth seeing. Tourists who cross the North Sea in April find their trouble well rewarded when they see the rich and varied colours stretching over the flat country in an unbroken sheet as far as the eye can reach.

The larger part of Holland's surface is of recent formation. Only in the south of Limburg, and in a few parts of the eastern provinces of Gelderland and Overijssel do the older strata reach the surface.

In Limburg there are veins of coal which are part of the coal fields existing in the Belgian Campine (Kempen) and in the German Westphalian area. The exploitable coal area of Holland is estimated to contain over 5 000 million tons. There is rock salt in some parts of the country, and in the south of Limburg there are chalk formations.

Large Reserves of Coal

The greatest depth from which coal is extracted in Holland is 3 600 feet. There is however a considerable reserve between 3 600 and 4 500 feet.

When the coal-fields of south Limburg, which are the only ones from which coal is extracted, are in full exploitation they will produce about twenty million tons a year. At present Holland consumes only about half this amount. Near Herkrade coal is found almost on the surface of the earth, the field then sloping down towards the north. Heerlen and Herkrade are the two principal mining areas.

Where the coal is situated at a relatively considerable depth great obstacles had to be surmounted before it could be reached. It was very frequently found to be covered by water which had first to be frozen before the pit shaft could be sunk into it. Part of the coal-mines, one may note, is exploited by the state.

About 35 per cent of Holland's wage earners are engaged in industry, 27 per cent in agriculture and 20 per cent in trade and transport. Fishing is an important source of income for the population. Over 27 000

people are exclusively engaged in fishing while the number of those who increase their wages by giving part of their time to this pursuit with all those who by making sails, nets, ropes, or by curing fish, etc., live indirectly by it is also very considerable. The position of Holland by the shore of the North Sea, the presence of a large gulf—the Zuider Zee—and of numerous rivers and stretches of fresh water have naturally created a large fishing population.

Crisis in the Fishing Industry

Over 6 000 ships and boats are used, 50 of them teamers and as many driven by motor power. We can distinguish three kinds of fishing. Sea fishing includes all fishing outside territorial waters and is mainly concerned with catching herring in drift nets in the North Sea near the Scottish and English coasts and in the English Channel. More than one half of the fishing population comes under this head. Dutch herring is considered superior to that caught by other nations because it is only on board Dutch ships that herring is salted immediately on being caught. When landed the fish is packed very tightly in barrels and exported. Before the Great War Germany was the main consumer of Dutch herring but the financial situation in that country has almost closed it as a market and the result has been a serious crisis in the sea fishing industry. The United States, Belgium and Poland came immediately after Germany and are still important consumers of salted and smoked herring. Fresh fish is also landed, and is consumed in the country itself. The principal centres for sea fishing are IJmuiden, Vlaardingen, Maassluis, Scheveningen, and Katwijk. The government controls the quality of exported fish, and guarantees it by marking the receptacles.

Coastal and Freshwater Fisheries

Coastal fishing operates in territorial waters, in the Zuider Zee and in the river mouths. The principal catches are a small kind of herring, anchovy



Royal Dutch Air Service

GENERAL VIEW FROM THE AIR OF MIDDELBURG, THE PROSPEROUS CAPITAL OF THE PROVINCE OF ZEELAND
 Middelburg lies almost in the centre of the island of Walcheren four miles north north east by railway of Flushing. The older part of the town is surrounded by a ring of streets and contains several interesting architectural features, noteworthy among which is the Protestant Nieuwe Kerk or New Church in the Groenmarkt, with a beautiful tower 250 feet high rebuilt in 1713-18 and possessing a fine carillon. The famous old Stadhuis or town hall, in Gothic style, with a 180 foot tower, built from the beginning of the sixteenth century, is seen on the left of the photograph its highly ornate façade flanking the north east side of the market square



See at Desk
Survey

THE HAGUE, RICHEST CITY AND STATELY ADMINISTRATIVE CAPITAL OF THE KINGDOM OF THE NETHERLANDS

Lying in flat country two and a half miles from the North Sea at Scheveningen, the city of The Hague is pleasantly laid out with spacious streets, lofty houses and delightful squares. For many centuries an important centre of diplomacy the city has given its name to several treaties and has long been the residence of a royal family and the seat of the legislative and central judicial bodies of the country. Behind the ornamental sheet of water in the foreground the Binnenhof, an irregular pile of buildings enclosing an open space, on the east side of which stand the old Hall of the Knights, the meeting place of the Dutch Chambers

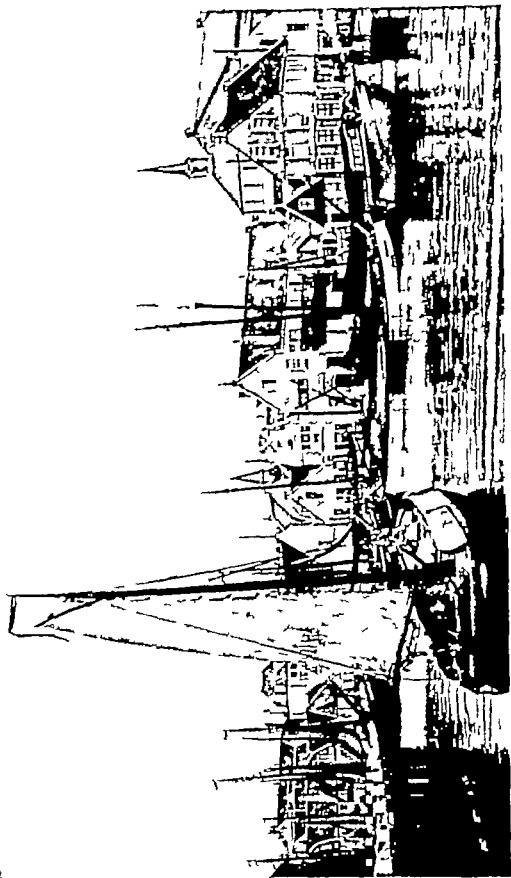


HOLLAND In old Dordrecht the capital of old Dutch costume still worn with pride are a great attraction for the visitor

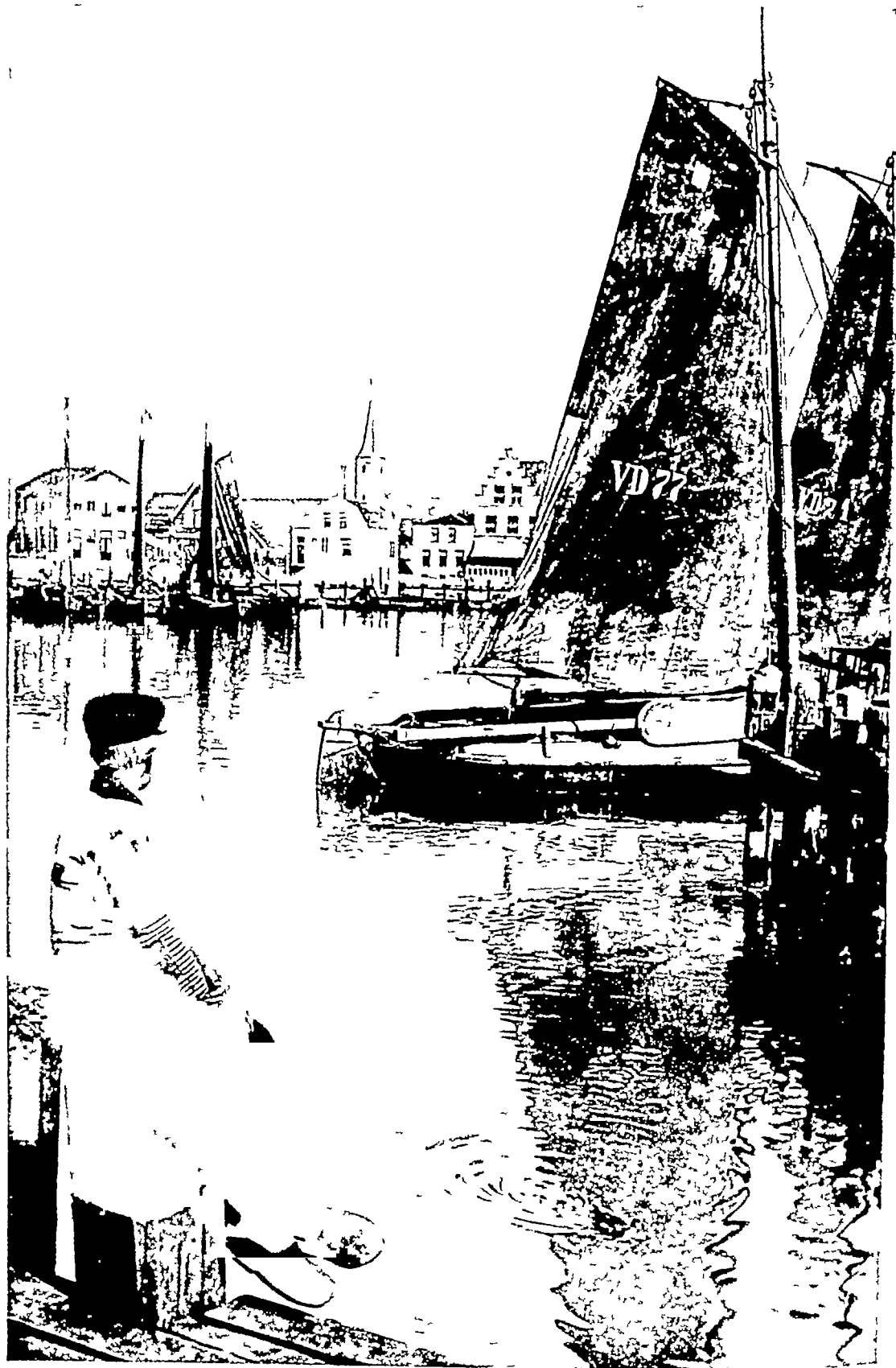


HOLLAND Much frequented by artists because of its numerous medieval treasures, Veere, one of the quaintest of Dutch "decayed cities," lies on the north coast of the island of Walcheren some three miles from Middelburg

Donald McLeish

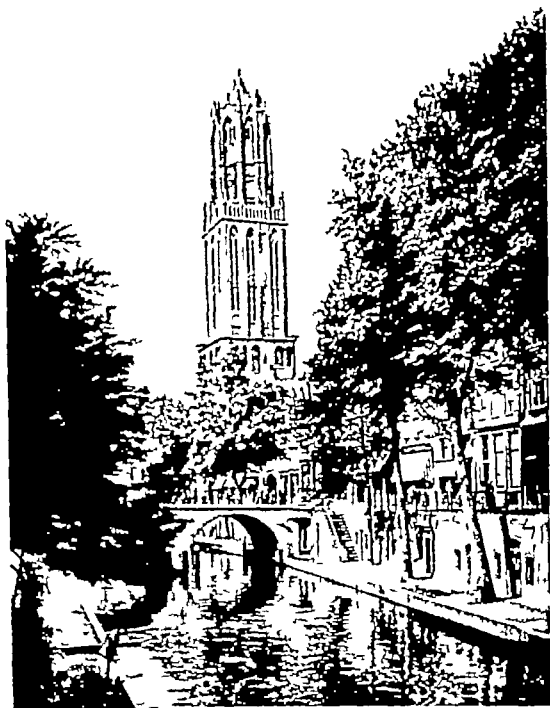


HOLLAND The small harbor of the fishing and fishing mack with the tall mast. The small harbor of the fishing and fishing mack with the tall mast.



Donald McLeish

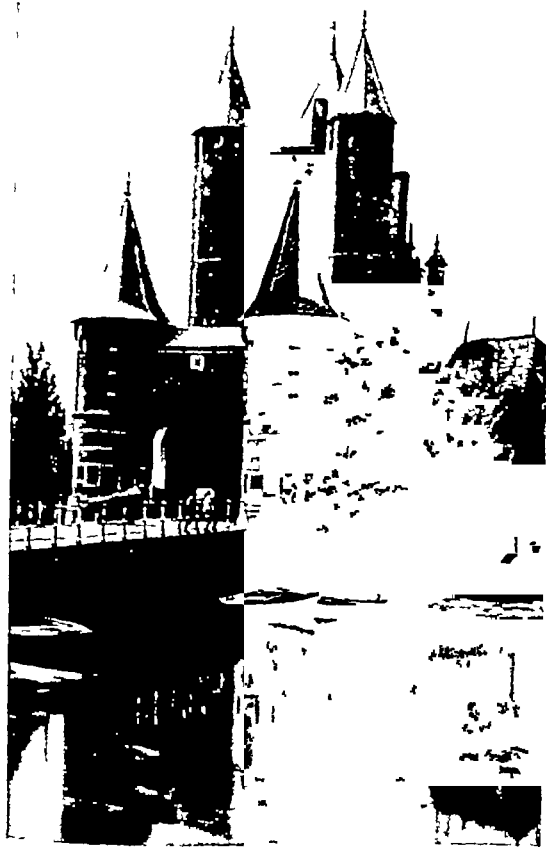
HOLLAND A fascinating spot on the Zuider Zee, the village of Volendam houses a thriving but conservative Dutch fishing community



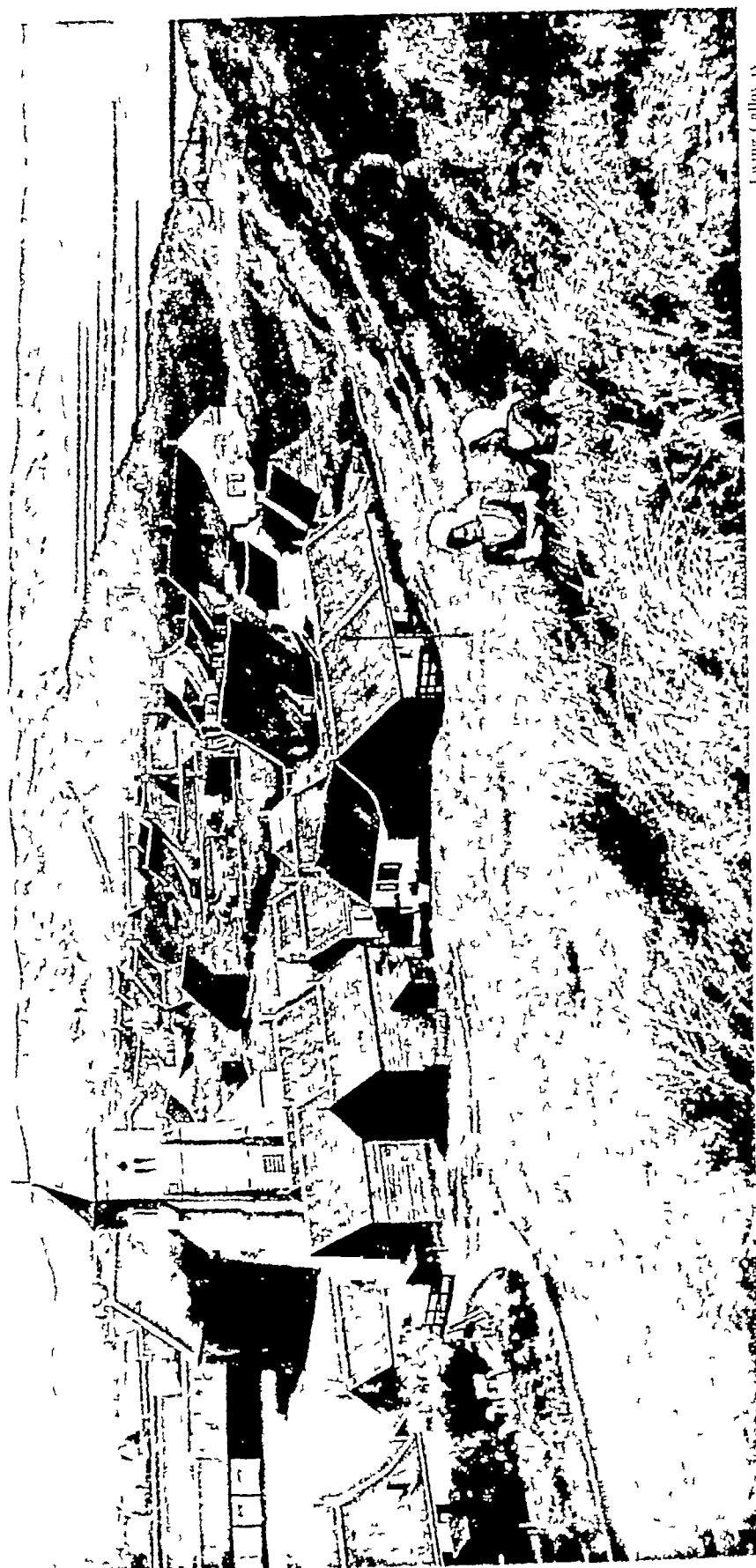
HOITIA D The fourteenth century cathedral tower 338 feet high
soars proudly above Utrecht's old fish market dwellings and canal rears



HOLLAND *In the pleasantly wooded district around Arnhem*
Middachter Avenue with its giant beeches is lovely at all seasons



HOLLAND The dignified many-towered Spaarnewouder or Amsterdam Gate is the only survivor of the medieval town gates of Haarlem



Living Callos 13

HOLLAND Behind the village of Zoutland, peopled by thrifty folk who rarely venture farther than a day's cart ride from home, are sandy dunes, nature's own protective earthworks against the inroads of the North Sea

receded into the background and cotton manufacture is the principal textile industry. The district of Twente in the eastern province of Overijssel specialises in cotton spinning, but cannot by any means supply the needs of the country which imports considerable amounts of spun yarn from Great Britain. Cotton weaving is concentrated in the province of North Brabant.

A very important occupation is the preparation of foodstuffs. Flour is manufactured in some 40 large factories which employ over 2,000 hands. The produce is marketed by means of agents and commercial travellers. Cake and biscuits are exported to most European countries and to the colonies. Rice imported from the Dutch East Indies is polished and largely exported to European countries. Dairy produce is treated scientifically, preserved milk and margarine being sold to most European countries.

Cooperative System of Sales

The excellence of Dutch agricultural produce, the possession of large colonies and the existence of numerous shipping lines have created the important industry of preserve-manufacturing which works largely for export. Dutch spirits are world famous.

Tobacco, especially in the form of cigars is manufactured from Dutch East Indian, Brazilian and Hungarian leaf.

The metal industry is growing, machinery, especially for shipping needs is made principally along the lower part of the river Maas. The raw material has to be imported. Dutch tiles and pottery deserve special mention and the Gouda ware in particular possesses a reputation that has lasted for centuries.

The marketing of produce plays a large part in the occupation of the Dutch. It is highly organized. Cooperation, especially for the sale of dairy and garden produce, is well established, and the auctions of fresh vegetables with mechanical time-saving devices, in which the contents of a barge are sold in three minutes time after the examination

of only a few samples are a feature of Dutch economic organization.

Banking is prosperous and well organized but payment by cheque has not taken the place in daily life which it occupies in England. Private banks still flourish and how much tendency to become absorbed in large joint stock organizations. Even in dealings in foreign exchanges, the result of Holland position at the cross roads of big trading nations are mostly felt to the private banker.

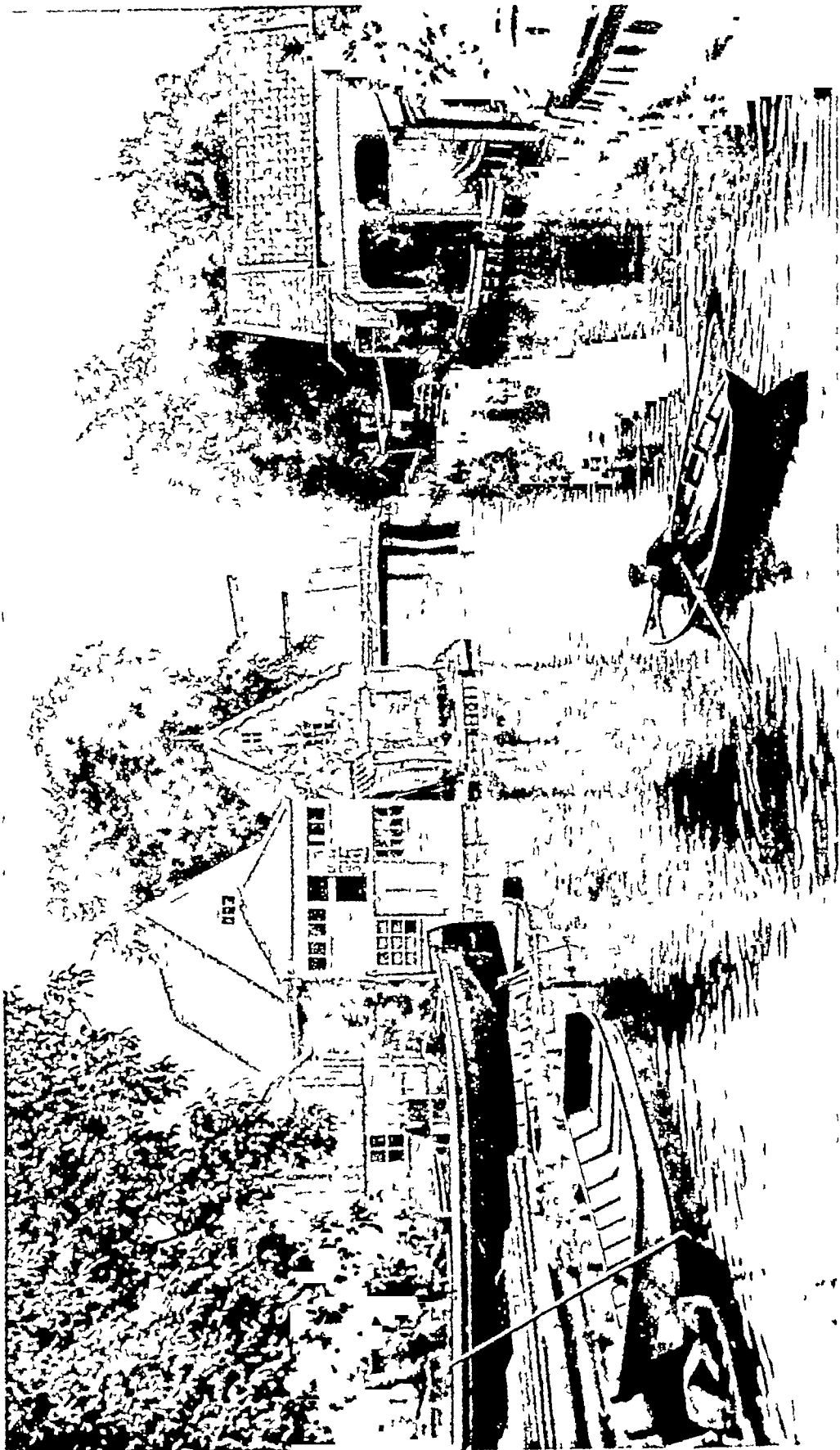
Internal Attitude of the State

Bureaucracy though not only is welcome than in most other countries, is far more ubiquitous than in the United Kingdom. The state follows its citizens with paternal interest and Dutch citizen is subject to more registration formalities than an alien in Great Britain. Examinations of a searching nature as are a high standard among Dutch civil servants.

The Dutch are well educated. Compulsory education, excellent modern method, a profusion of schools produce excellent material from which the professional classes recruit themselves. The medical and educational services are of the first order and the social status of teachers, especially secondary teachers, and of professional people in general is decidedly superior to that of their colleagues in England.

Travel by Bicycle and Boat

There is a net of excellent roadways. Special care is given to the upkeep of cycling roads. Almost every Dutchman possesses his own bicycle and the aspect of the big towns when offices and shops are about to open or are just closing strikes the visitor because of the dense stream of cyclists who pedal along to their work or back home. But road transport plays only a secondary part. The configuration of the soil has put at the disposal of the Dutch a unique system of canals and waterways, and all transport that is not of an urgent nature is done by water. Barges, which are



Donald McLeish

OLD EDAM, ERSTWHILE FISHING PORT AND NOW RENOWNED FOR THE BEST OF GOOD DUTCH CHEESES

Edam was in former times a fishing and trading port but its prosperity declined as did that of Stavoren and many other "dead cities of the Zuider Zee," but though ruined, among Holland's decayed cities it is still famous for its cheese and gives its name to the cheese of the whole district. Although cheese making is not confined to any one province the North Holland province is said to have the largest production and the finest quality. Holland has two kinds of cheeses, the Rotterdam rindless kind known to commerce as Dutch cheese and the flat blokked cheese chiefly made at Edam.

increasingly driven by motor power transport garden produce to the big towns. The cargo of sea going ships is partly unloaded into river boats which serve even for international transport—to the Rhineland and to Belgium. The large Rhine boats house several families, and special arrangements are made for educating the children of this floating population of barges.

There are in Holland two principal railways with a length of 2 392 miles, and nearly 1 835 miles of tramway lines. There are three main international railway thoroughfares connected with shipping services from England. Hook of Holland and Rotterdam to Berlin. Hook of Holland and Rotterdam to Basel and Flushing to Basel and Vienna. The railway services are run by companies controlled by the state. Regular air services are run to London and to Berlin. Postal telephone and telegraph services are in the hands of the state.

Life in Town and Village

There is, in Holland no theoretical distinction between town and village. The whole country is divided into *communes*, "*Gemeenten*," all of which have the same institutions. The sense of communal life is highly developed. In the less fertile province of Drenthe where farms are farther away from each other there are places where the farmers live in the villages, while their farms are perhaps half a mile away.

The difference between farm buildings in various provinces is very striking, when one considers how relatively small the country is. Village life with its publicity its sharing between all of the happenings that affect a single member is the most general condition of existence in Holland. But town life is the lot of by no means an inconsiderable number. About 40 per cent of the whole population lives in the twenty four largest towns. Big cities are more or less concentrated in the north western part of the country. Amsterdam Rotterdam and The Hague are all within easy distance of one another

and are linked up by train and by good tramway systems.

Life in the large cities of Holland does not show a striking difference from English town life. But the aspect of the towns is quite characteristic, and towns are the principal object of the tourist's interest. Holland possesses a quantity of remarkably picturesque and charming old centres. Canals, planted with trees pass between rows of fine houses with beautiful gables.

Architecture and Sanitation

Specimens of the fine domestic architecture of the seventeenth century still abound. But modern architecture has also brought its contribution. Originality and a laptation of every building to the purpose for which it is erected are the work of the twentieth century architect who exercises his fancy and experimental spirit even in the design of workmen cottages. The old towns of Delft Gouda, Leiden, Alkmaar Dordrecht Leeuwarden Deventer and Middelburg are all equally beautiful and worth visiting.

The public organization of sanitation is not surpassed by that of any European country. The public authorities give perpetual attention to health problems. A number of health committees propagate sound hygienic ideas. The law imposes very stringent regulations upon the building of houses, the management of factories and child labour. Statistics of birth and mortality compare favourably with those of other countries.

A Town of Civil Servants

No description of Holland could be complete without some reference to her chief cities of which Amsterdam the largest and the commercial capital has already been dealt with in this work.

Although The Hague (362,000 inhabitants) is not called the capital of the country it is the seat of government and of the two houses of Parliament and the residence of the queen. This fact has impressed upon The Hague its character of a town of civil servants,



MAIDENS OF MARKEN'S FISHING COMMUNITY

Costume in Holland is decidedly in decay, but the people, numbering some 1,000 souls, of Marken island, which lies in the Zuider Zee ten miles to the north east of Amsterdam, cling loyally to their distinctive dress and their houses retain much that is peculiar

retired Indian officials and persons of independent means. Since 1900 its population has increased by 75 per cent. Industry in such a place is naturally of secondary importance. The Hague strikes the visitor as being more leisurely than Amsterdam or Rotterdam.

There are busy markets for cattle and agricultural produce. The town has excellent railway communications, and is linked up with the surrounding country by a tramway system. There are very important ship-building yards in the suburb of Feijenoord.

HOLLAND GEOGRAPHICAL SUMMARY

Natural Division. A deltaic lowland, reclaimed from the sea, a region of natural and artificial watercourses, due to the set of the tides and currents of the North Sea and the alluvium—the off-scourings of the Alps and the block mountains of Europe—brought by the Rhine, Maas and Schelde. A definite section of the North European plain. (Cf. Belgium, Germany North.)

Climate and Vegetation. Climate is West European type, with slightly harsher winters, as indicated by the frozen canals, than S.E. England. Except for small patches (cf. the Boertanger Moor) there is little natural vegetation left, since cultivation of the soil is almost universal.

Products. Entirely the result of intensive cultivation (cf. Belgium, Denmark) or the colonial trade, skill counts for more than mere physical labour. Bulbs, beet-sugar, flax, fresh vegetables and fruit. Herrings, anchovies and oysters. Butter, cheese, preserved milk,

margarine. Ships. Diamonds, tobacco, coffee and colonial products.

Communications. Mainline railway traffic to the European capitals. Excellent roads for cyclists and motorists. Canals for barge traffic and for skaters in winter.

Trade. Transit trade from the countries of the Rhine valley. Entrepot trade in colonial produce (Cf. London). Dutch trade in the products of Holland and in the import of wheat and coal.

Outlook. Holland has been an object lesson to the world in the making of a prolific farm land from the waste lands which naturally line a lowland sea margin and also in the development of highly productive and scientific cultivation in a tropical land, the Dutch East Indies. The land has become what it is because the Dutch have laboured to create its wealth, and past success prophesies future progress. The drainage of the Zuider Zee and the creation of vast stretches of new farm land will continue the object lesson.

Golden Prairies of the Danubian Plain

by Walter Jerrold

Author of *The Danube* etc

THE state of Hungary as it was left after the transferences of territory following the Great War probably occupied much the same tract of low-lying country as that first overrun by the Magyars when they reached Europe from the East rather more than a thousand years ago.

It consists of a great part of that south-eastern European plain through which the Danube flows in the mid-part of its course after passing through the mountain system of the Little Carpathians and before breaking its way through the great Kazan defile and the Iron Gates, which separate the Transylvanian Alps on the north bank from the Balkans on the south. On this plain the warlike Magyars settled, though the state they created was greatly aggrandised later by expansion north and east to the Carpathian mountains, west to the Styrian foothills and south to the Danube. It is now bounded on all four sides by territory that was once Hungarian but has been transferred to the states of Czechoslovakia, Rumania, Serbia and Austria. The boundaries have come to be racial rather than physical.

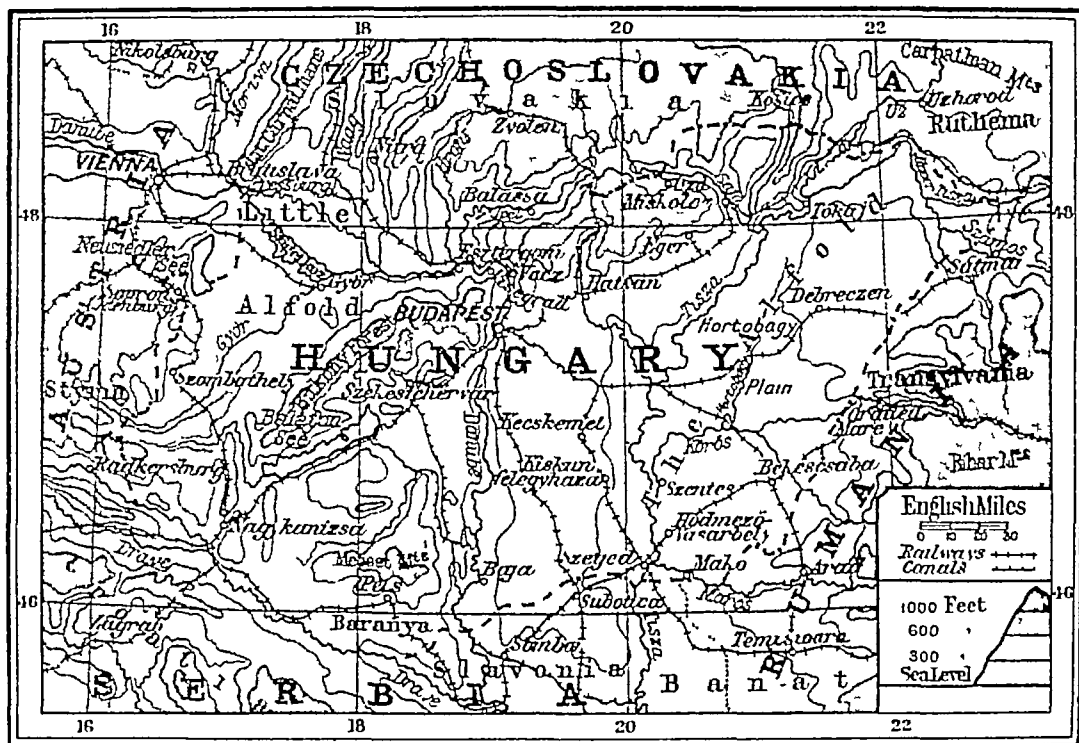
Danger of Arbitrary Frontiers

The country roughly an oval the greatest length of which is from east to west is 36,179 square miles in extent or slightly larger than Portugal. It is watered by the Danube and some of its main tributaries flowing from the Carpathian mountains. So much of the great plain as remains under the Hungarian flag is inhabited almost wholly by Magyars, who form 83 per cent. of the entire population of the country which is close upon 8,000,000.

The main ranges of the Carpathians and the Transylvanian Alps lie well away to the north and south-east and no longer afford the natural boundaries. To the north-east the southern shore of the Neusiedler See and the right bank of the Danube and for some distance south-west the left bank of the Drave form natural boundaries, but for the rest the boundaries may be described as arbitrary rather than natural. This is one gathers from talks with the Magyars themselves and with people of the neighbouring states that have profited by the dismemberment of the old Austrian Empire will long prove a source of international irritation.

Shifting Sands of the Alföld

The Alföld, or great plain, lies at an elevation of about 250 feet above sea level and is in the main a typical grassland on deep alluvial soil and sand with low sandhills in the north and numerous lagoons diversifying in parts the prairie-like expanse called *puszta*, or heathlands. The most considerable river is the Tisza, which roughly bisects it. There are few trees except where these have been planted about the towns and villages or where the acacia has been extensively cultivated with the object of banding the shifting sands of the north-east. That part of it which lies between the roughly parallel courses of the south-flowing stretch of the Danube and the Tisza and a large tract in the north-east of the country are especially broken by innumerable lagoons, some of them of considerable size. This tract between the rivers is sometimes spoken of as *humana*, but the Hungarians themselves give the name of Alföld to the whole expanse of



MAP OF HUNGARY'S GREAT LEVEL ACRES

the plain from the Danube to the mountains, though there is a slight but inappreciable rise in the interfluvial western portion of it

West of the Danube lies the hillier part of Hungary and the shallow Lake Balaton, about 250 square miles in area and 50 miles long, some 30 miles from the capital, with much marshland in its immediate neighbourhood, especially about its southern end. Beyond the lake stretches the upland known as the Bakony Forest. Only here and there does the country rise to hills of any height, as in the angle of the north-eastern bend of the Danube, the elevation nowhere being more than 2,000 feet above sea-level. In the extreme north-west lies the larger part of the Little Alföld plain, the trans-Danubian portion of which is now part of the Czechoslovakian republic.

It was as a pastoral and military people that the tribes pushed westward in the ninth century and settled upon the far-spreading Danubian plain, which had been part of the extensive Roman province of Pannonia. The great grassland afforded seemingly inexhaustible

pasturage for flocks and herds, and for the horses with the breeding of which the Magyar people came to be, and long remained, more especially associated. In course of time, after Hungary came under Austrian rule, owing to the demands of the predominant partner a large part of the grassland of the Alföld came under arable cultivation.

The breeding of horses, the grazing of flocks and herds gave way to the cultivation of corn until by the close of the nineteenth century the great plain was regarded as one of the granaries of Europe. Its extensive stretches of wheat and maize form one of the most memorable impressions that we bring away with us from a journey across the Alföld, recalling to those who know something of Canada those vast grain-golden tracts of the western prairies of the Dominion. In late summer the Alföld may also show a golden harvest stretching far as the eye can see, while the parallel in winter also holds good, as for nearly three months the Hungarian plain may show one vast expanse of snow and the great rivers be frozen so that with the break up of the ice

there is a menace of devastating floods. The suitability of much of the land for their cultivation has made wheat and maize the outstanding crops of the country while rye and barley are also extensively grown and considerable areas are given over to oats and potatoes.

Sugar beet is increasingly grown. In several parts of the country there are notable vineyards, especially on the Upper Tisza where Tokaj has given its name to a long famous wine. Though much of the fertile plain has thus been brought under arable cultivation, on extensive tracts of the *puszta* or wild grassland large flocks and herds are still maintained, and this is particularly true of the north-eastern Hortobágy Plain. The well-mounted "cowboys" and the shepherds with their long coats of woolly fleece and coloured jackets, are striking figures of the *puszta*.

Hungary is now to a greater extent than ever an agricultural country, the transference of territory having taken

from it rich mining and extensive forest regions of the Carpathian and other of its old border-country districts which had fair to make it increasingly industrial. The only mining industry left is that of coal, mainly brown coal of poor quality, the main deposits of which are in the upland country to the west of Budapest in the Bakony Forest area. The only district remaining in which bituminous coal is worked is in the neighbourhood of Pécs in the angle formed by the Danube and the Drave approaching their confluence, and this does not at present yield sufficient pit-coal for Hungary's own requirements though it is hoped by increased production to lessen considerably the country's dependence upon imported supplies.

Although coal mining is Hungary's second largest industry it comes a long way after the first in importance. The outstanding occupation of the people is agriculture, which in its various branches engages the attention of



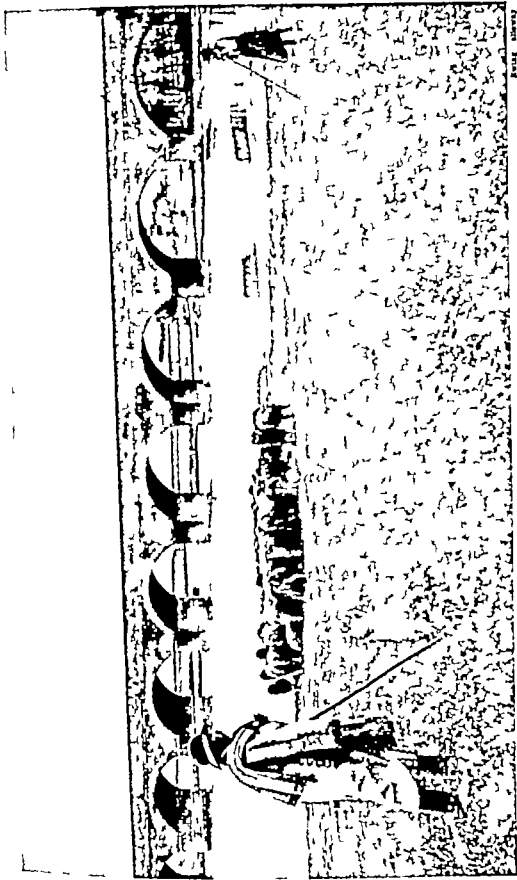
NEW CLINICAL HOSPITAL CONNECTED WITH DEBRECEN'S UNIVERSITY

The new Clinical Hospital of Debrecen has been erected in a clearing in the forest bordering on the town, and was opened by Admiral Horthy in 1923. It is connected with the university, formerly the Protestant College for students of theology and law, which was founded in 1533 and contains various scientific collections and a fine library of some 100,000 volumes.



WILD, UNFETTERED LIFE ON THE ALFOLD OF HUNGARY THE HORSEHERD WITH HIS CHARGES

Often referred to as the puszta, or steppe, the Alföld of eastern Hungary is a vast, treeless grassland which, like a calm ocean, stretches away into infinity, its smooth monotony relieved here and there by sand hillocks and lagoons of varying size. Formerly the plain was devoted to livestock breeding, chiefly horses, and the excellent quality of the Hungarian horse is well known. In those days the world belonged to the herdsman, now, however, the Alföld is mainly agricultural and large areas have been converted into wheatfields which have transformed it into one of the granaries of Central Europe.



SHEPHERDS AND FLOCK ON THE BANK OF THE RIVER TISZA IN SOUTH EASTERN HUNGARY

The Hungarian plains comprise the Little Alfold in the north west corner of the republic, the northern part of which leads to Slovakia, and the Great Alfold, simply known as the Alfold, which occupies most of the area between the Danube and the Tisza mountains on the border of Transylvania. The chief river of the Alfold is the Tisza, or Theiss, the largest affluent of the Danube, which, flowing from the Carpathians in Rumania into the north east of Hungary, traverses the plain and leaves Hungary south of Szeged to join the Danube below it. Its extremely tortuous course exceeds 500 miles in length.

considerably more than half of the total population and provides the greatly preponderating proportion of Hungarian exports, while a number of subsidiary industries are more or less directly dependent upon it. So largely is agriculture the pursuit of the people that it is said that even should the harvest fall so far below the average as to be dubbed a "failure," it would still provide not only sufficient for the needs of the home population, but something to spare beyond. This is not surprising to those who have seen the grain-grown stretches of the Alföld smiling under brilliant summer sunshine with the ripening wheat or maize.

Melons Among the Maize

The stretches of the latter crop are frequently overtopped by the great heads of sunflowers, while rambling among the lower growth run the vines of great green-coated, purple-fleshed melons, especially in the neighbourhood of the scattered farm steadings. Such low, scattered buildings are frequently to be recognized from far off by the neighbouring well-poles. These curious poles are a common characteristic of the lowland scenery. On the top of a tall, perpendicular pole another long, tapering pole is placed transversely, from the thinner end of this hangs a bucket, while at the other either the roughly-trimmed stump of the tree of which the pole is formed, or some heavy thing bound on to it, affords a counter-balancing weight when the bucket is drawn up full. A well of this kind is to be seen by each of the low, white cottages or farmsteads, and by them, too, are frequently seen little "granaries," similar in size and form to those found in the north of Spain, though plainer in design.

Ripe Colours of Harvest Time

The fact that the plains are frost-bound for about a quarter of the year means that all cultivation of the soil and harvesting of the crops have to be crowded into the remaining months.

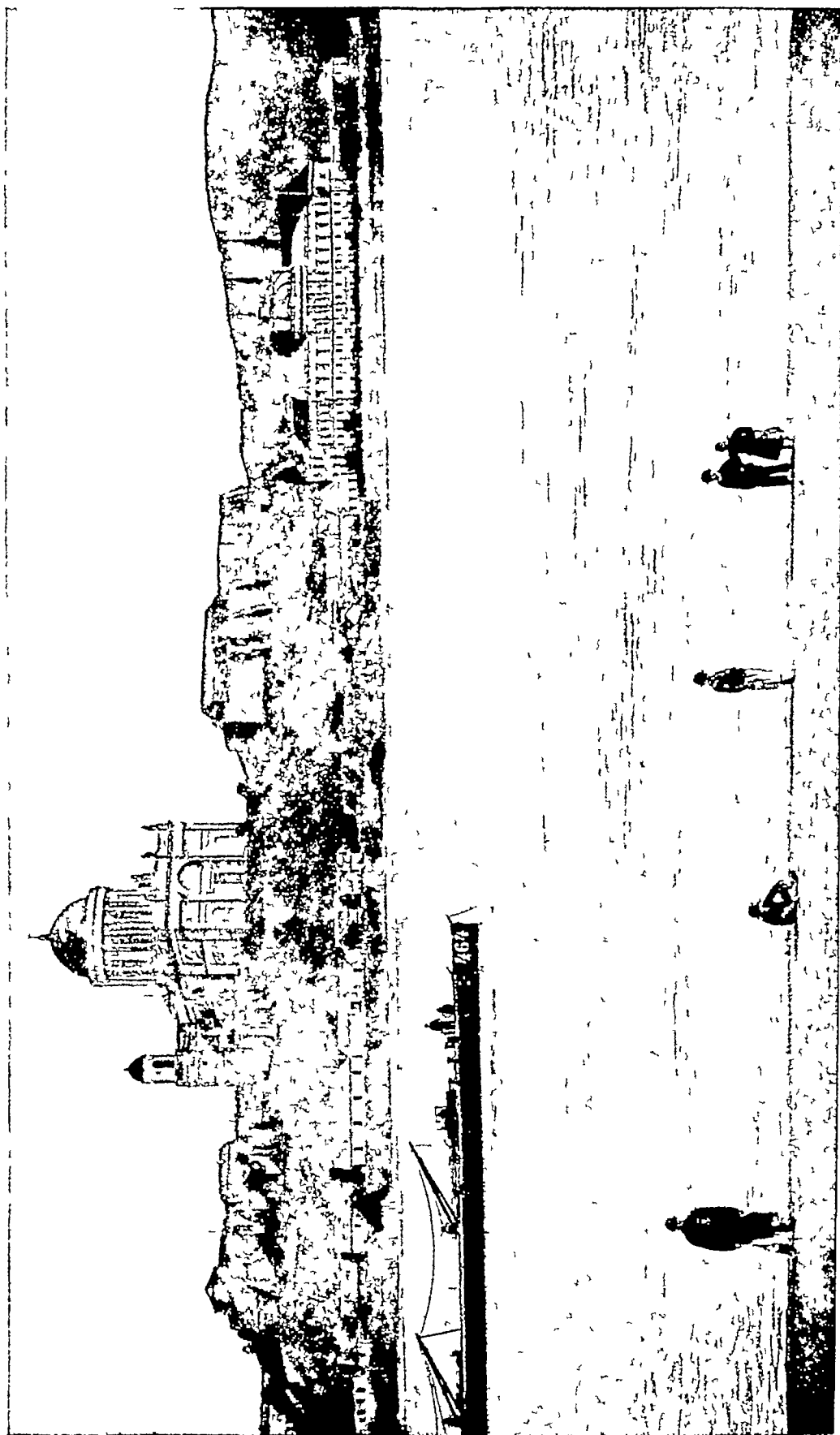
For the harvesting a good deal of extra help is frequently needed, and large companies of labourers have long been accustomed to come down from the Slovakian valleys and other districts to take part in it. The harvest is taken from the fields in long wagons drawn by wide-horned oxen. The maize is husked in the open field, and the great piles of rich golden cobs with, maybe, small heaps of the great green melons near by surrounded by ripening foliage of the rified maize canes afford, with the men, women and children who have taken part in the husking, wonderful colour pictures that memory brings to mind at the mere mention of the name of the Alföld. We feel in sympathy with the poet of the great plain who wrote "Far away, where the sky touches the earth in mist, the blue orchards are to be seen. Behind them the spires of the churches of the distant towns stand out in dim, fog-like streaks. You are beautiful, Alföld! At least, you are beautiful to me."

Laden Orchards of the Plain

The orchards of which Petöfi speaks are generally found near the villages, and indicate another aspect of Hungary's agricultural energy, for great quantities of various fruits are grown, largely for the Austrian market. Great quantities of dried plums are exported, and from the same fruit is prepared the heady spirit which is the national drink.

Chief of the manufacturing industries developed from or dependent upon the dominating pursuit of agriculture are flour-milling, which is mainly carried on at the capital, Budapest, the making of beet-sugar and the manufacture of methylated spirit. The mills are capable of dealing with three-quarters of a million tons of grain each year. Sugar-making—over one hundred thousand acres of sugar-beet are cultivated—is carried on in a number of factories which in a good year provide all the country's requirements and a considerable margin for export. Much the same may be said of the production of methylated spirit.





ESZTERGOM ON THE DANUBE WITH ITS CATHEDRAL, ONE OF THE FINEST SANCTUARIES IN HUNGARY

On the right bank of the Danube, 38 miles by rail north west of Budapest, is situated the Hungarian city of Esztergom, also known as Gran. It is the ecclesiastical capital and possesses a magnificent cathedral which in architectural style resembles St. Peter's at Rome. Situated unimposingly on an eminence 215 feet above the river, this fine edifice was begun in 1820 and only completed during the latter half of the nineteenth century, its dome is 260 feet high and 52 feet in diameter. The two pointed towers on the right of the photograph crown the Church of St. Ignatius, near which rises the stately palace of the Primate.

Other of the industries of the country have been greatly curtailed, and some of them even threatened with extinction by the loss of native materials consequent upon the great shrinkage of the national frontiers that followed the Great War. Wood-working and furniture making for example, are almost hopelessly handicapped by the fact that Hungary, which was wont to export large quantities of timber has now to import it for her own needs. For the ironworks, too all ore has to be imported, though the discovery of an iron ore deposit at Eger about 70 miles north-east of Budapest was recently reported. What was a notable and developing industry employing some 70,000 people is at present reduced to little more than half its capacity.

Hungary Lost Factories

One of the largest of the ironworks is that at Ózd, near the Slovakian frontier. It may be noted that these and other works, such as textile and leather working factories, which were established when Hungary was making a bold bid for industrial development, are thoroughly well equipped with modern machinery and improvements.

In a typical leather establishment—now become Rumanian—it was possible to follow the process from the arrival of the raw hides at one end of the factory to the other end where the hides had been transformed into well made boots ready for despatch to the shops.

A very marked feature of Hungarian life is the great extent to which trade, commerce and industrial concerns generally are in the control of Jews, the Magyars rarely interesting themselves in any such concerns, though the state has taken a keen interest in furthering any fresh project for their development and expansion. The many banks, again under Jewish heads, are for the most part trading banks controlling a very large proportion of the country's industrial organizations.

Mention has been made of the slow restoration of the means of transport

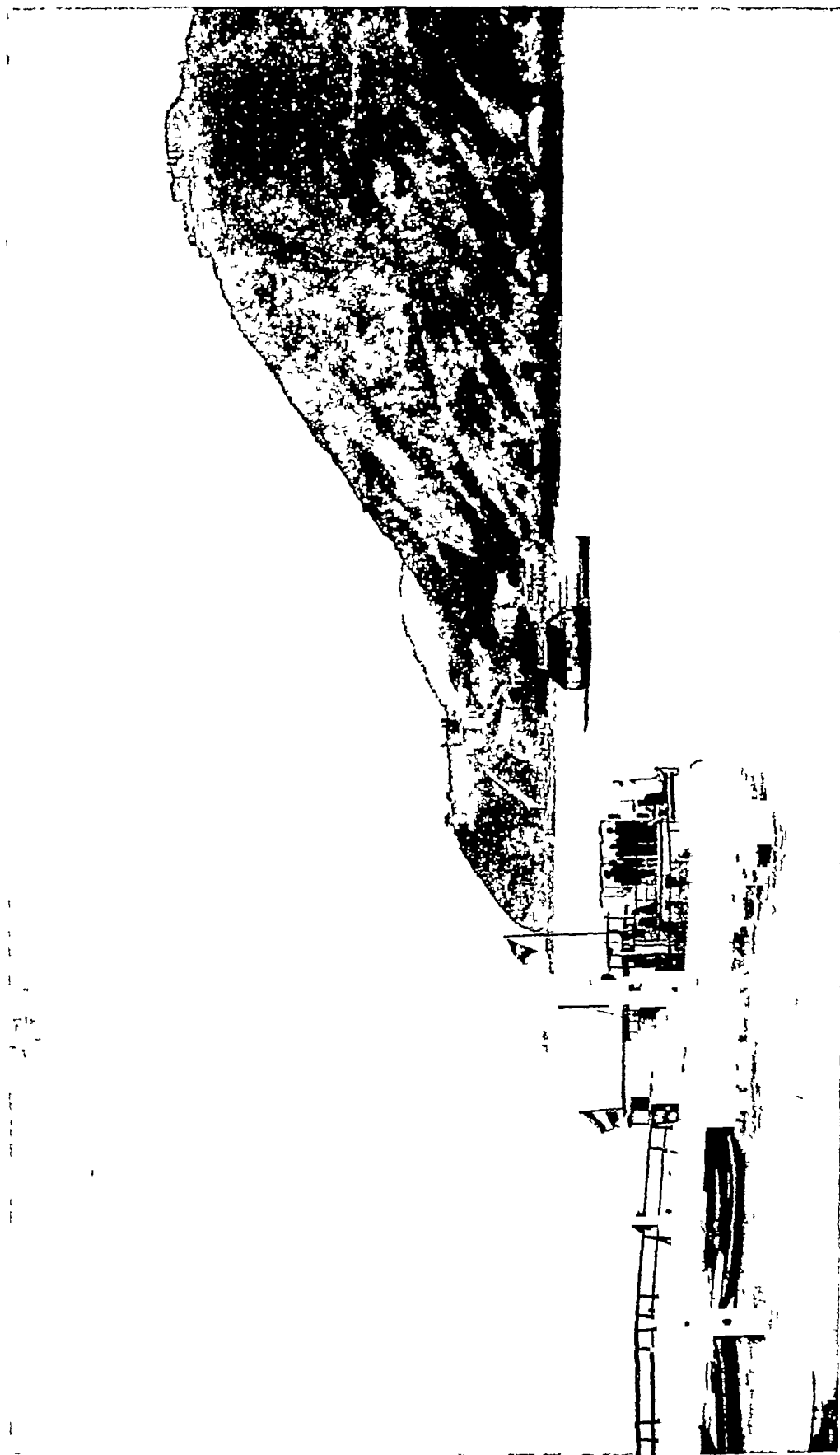
and internal communications. Though Hungary possesses about 4,500 miles of railway—mostly single track—it still lacks a sufficiency of rolling stock and especially of locomotives so that the gram on which the welfare of the country so largely depends is sometimes held up for a considerable time. This has been emphasised by the house shortage consequent upon the influx of about a quarter of a million Magyars from those part of the old state transferred to other rule.

State Railways and Bad Roads

Thousands of these immigrants took up their domicile in the railway coaches on many railway sidings. Such colonies of railway dwellers are however not peculiar to Hungary, but have formed a familiar sight to the traveller about central and south-eastern Europe since the Great War. The railways, which are to a large extent controlled by the state, all work being carried out in the state repair shops, are the more important in that highway communication is for the most part poor. The roads in the capital and in the large towns are from fur to good but those connecting the different towns are generally bad, mostly unsuited to modern motor traffic and only usable by the country carts and ox-drawn wagons, while the byways are frequently no more than tracks across the *puszta*, worn by such vehicles.

Increasing River-borne Trade

River communication—with nearly 700 navigable miles—is chiefly along the Danube and the Tisza. Steamers ply down the former river to Belgrade, and up-stream to Bratislava and Vienna. The new frontier having been drawn far north of the junction of the Tisza with the Danube has hampered the valuable river connexion of the capital with Szeged the most important of Hungary's provincial towns and the main market centre for the Alföld. Navigation of the Danube is controlled by an international commission but until the states through which it flows are



Hungarian Legation

HISTORICAL RUINS OF VISEGRAD, RESIDENCE OF THE HUNGARIAN KINGS IN THE MIDDLE AGES

Beautiful riverine scenery is afforded by the Danube in north Hungary before making its broad bend towards Vác, whence it sweeps southwards to Budapest. On either hand picturesque mountains fringe the river, on the summit of an abrupt rock on the right bank the celebrated ruins of Visegrád are seen, while a small township nestles at the mountain's foot. The old castle was inhabited by Hungarian kings as early as the eleventh century, was lavishly embellished by Matthew Corvinus and finally fell a victim to Turkish greed. The eleventh century Solomon's Tower is seen on a smaller eminence in the central background.

constantly at work spinning or making for themselves or their menfolk those ornately decorated garments which are still worn on high days and holidays.

The principal city after Budapest is Szeged on the Tisza, close to the point at which that river passes into Serbia, nearly 100 miles from its confluence with the Danube and at the junction of railway communication with that country and Rumania. With a Gothic cathedral, a capital museum and a fine town-hall, this active city of nearly 120,000 inhabitants forms the principal commercial centre of the Alföld, and carries on a considerable trade both by rail and by river. Its roofed-in barges, each with high, curved, carven prow, brightly painted, looking like the forepart of some ancient galley, are employed for conveying in bulk the golden harvest of the Alföld to the mills at Budapest. Among the special manufactures of Szeged is paprika, the red pepper peculiar to Hungary, which is very delicately flavoured and far less pungent than cayenne.

Debrecen, a town of about 100,000 inhabitants lying 140 miles east of the capital and not far from the Rumanian border, is on that part of the Alföld known as the Hortobágy Plain, through which runs the river of the same name.

This is a great centre of the Hungarian cattle-rearing and horse breeding, the Debrecen horse market being famous, and the municipality owning great herds of the cattle that pasture on the plain. Here four fairs are held annually, the town being the great market centre for the northern Alföld districts. The streets are here planted with acacias.

Next to Debrecen in size comes Kecskemet, about 50 miles south-east of Budapest, with upwards of 70,000 inhabitants. This town, the largest in that part of the plain that lies between the Danube and the Tisza is in a district celebrated for its apple and apricot orchards and vineyards, and has important cattle and wheat markets.

In western Hungary the chief town is Győr, which is on the long branch of the Danube forming the southern side of the fertile river island Szigetköz (island between). Győr is an interesting old place with a story dating back to the Roman occupation of Pannonia. Next in importance come Szekesfehérvár, between the capital and Lake Balaton, centre of the most thickly populated part of western Hungary, and Pecs, an old and rambling town picturesquely built in a deep hollow in the Mecsek mountains near the coal-field to which it has given its name.

HUNGARY GEOGRAPHICAL SUMMARY

Natural Division. An alluvial plain drained by the middle Danube—a filled-up basin within the curve of the Carpathians and east of the Alps. (Cf. South Russia and South Rumania.)

Climate. A transition area between the West European and the severely continental types. Under continental conditions great extremes of temperature: intense summer heat, and severe winter cold for three months; the winds from the Atlantic sometimes in their passage northwards reach as far as Hungary and modify the extreme conditions. Rains usually fall in the summer, and the rainfall is, on the whole, small in annual quantity.

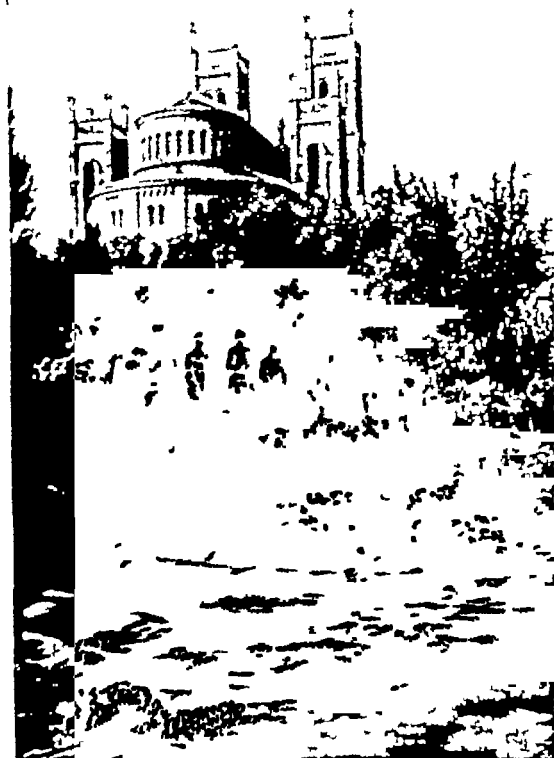
Vegetation. A natural grass land. (Cf. the Black earth lands of Russia and the Canadian prairie.)

Products. Mainly agricultural. Wheat and maize in large quantities. Hungarian flour has a European reputation. Cattle, hogs, and potatoes are grown less ex-

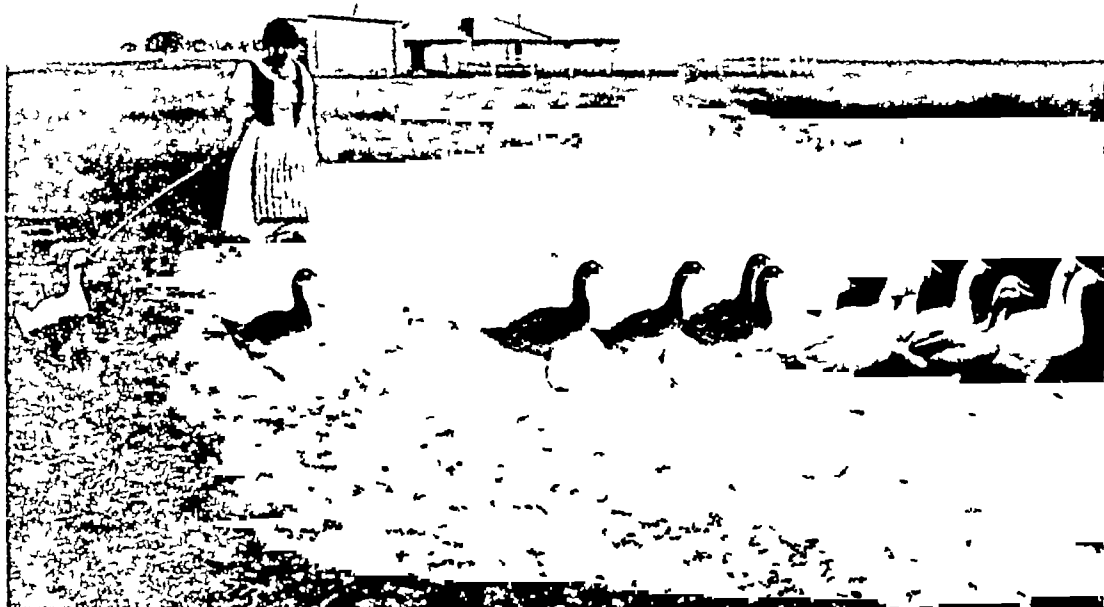
tensively. Sugar-beets yield a large share of the sugar consumed in Central Europe. Tobacco, grapes, Tokay wine, fruits (for plums, cf. Serbia). Horses, cattle and sheep. Coal.

Communications. The Danube and Tisza are used for river traffic. The roads are, on the whole, poor—many of them are unmetalled. The railways, arranged on the zone system centring on Budapest, are designed to facilitate traffic to the capital at the expense of the provincial centres; rolling stock is in a very bad state of repair.

Outlook. A peasantry and an aristocracy, without a middle class dependent on the land, and relying upon a few business elements, the people of Hungary lack the social and economic organization necessary for modern progress. Dependence on world trade, though less than in Holland, Hungary fails to make the best use of its natural resources.



HUNGARY Not far from Budapest lies Fővár an estate with a fine park and a very handsome Roman Catholic church finished in 1856



On the infinite expanse of Hungary's lowland plain are scattered isolated homes, many of them situated a day's journey apart



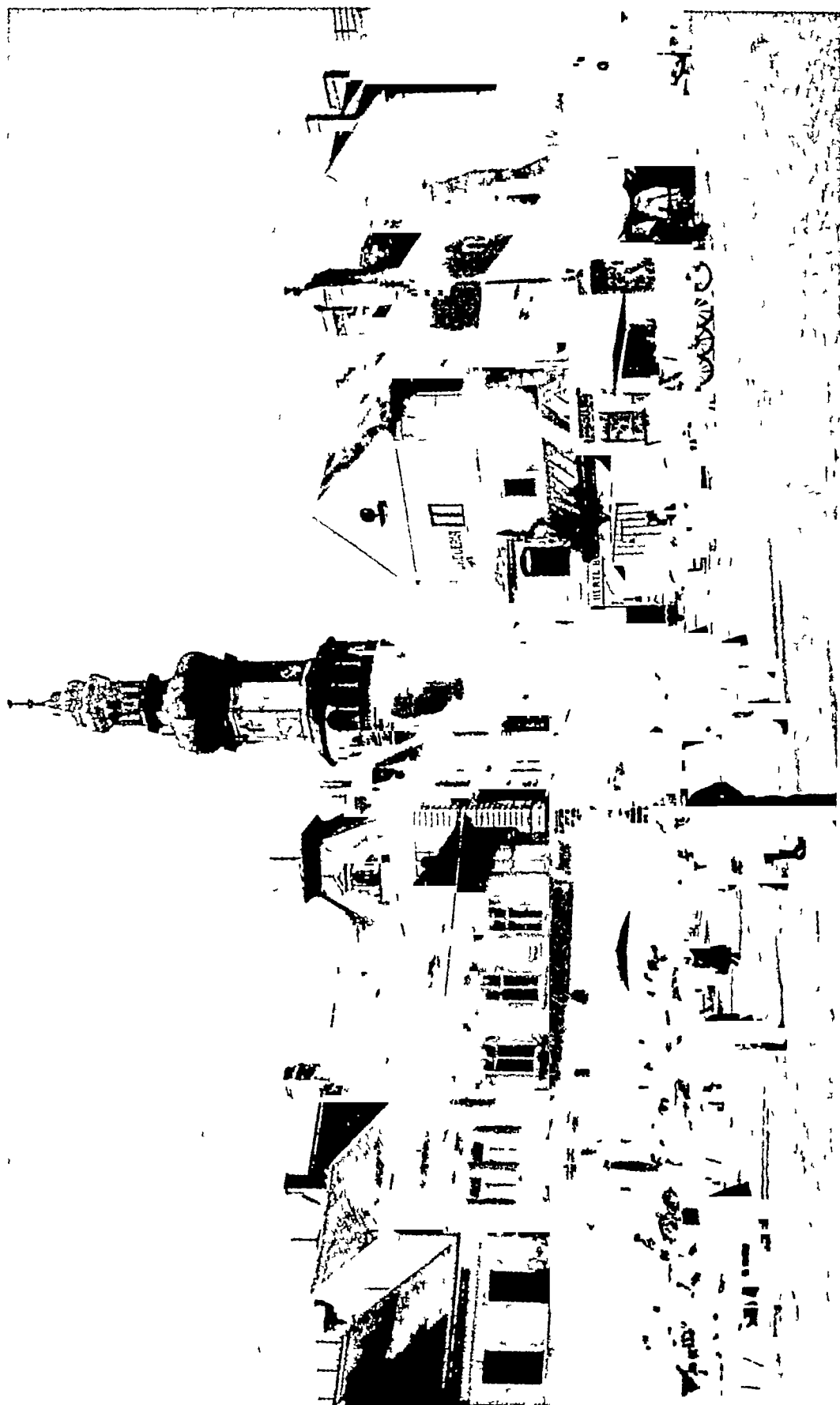
HUNGARY In the fertile district of Baranya, lying between the Danube and Drave, cultivation of wheat is now predominant



Fraknő Fortress is one of the many old castles residences of feudal lords which stud the highlands north of the Great Hungarian Plain



HUNGARY This is the principal street of Miskolc a busy trading town lying on the Sajo near the edge of the Carpathian foothills



HUNGARY Oedenburg, now officially known by its Magyar name Sopron, the old capital of Burgenland, lies a few miles west of the salt lake Ferto Here we see a corner of its Rathausplatz and 200-foot Town Tower



HUNGARY On the vast Hortobágy Plain near Debrecen, ploughing retains a truly primitive aspect. proud of their four in-hand teams the farmers would not dream of permitting the famous horned cattle to be superseded

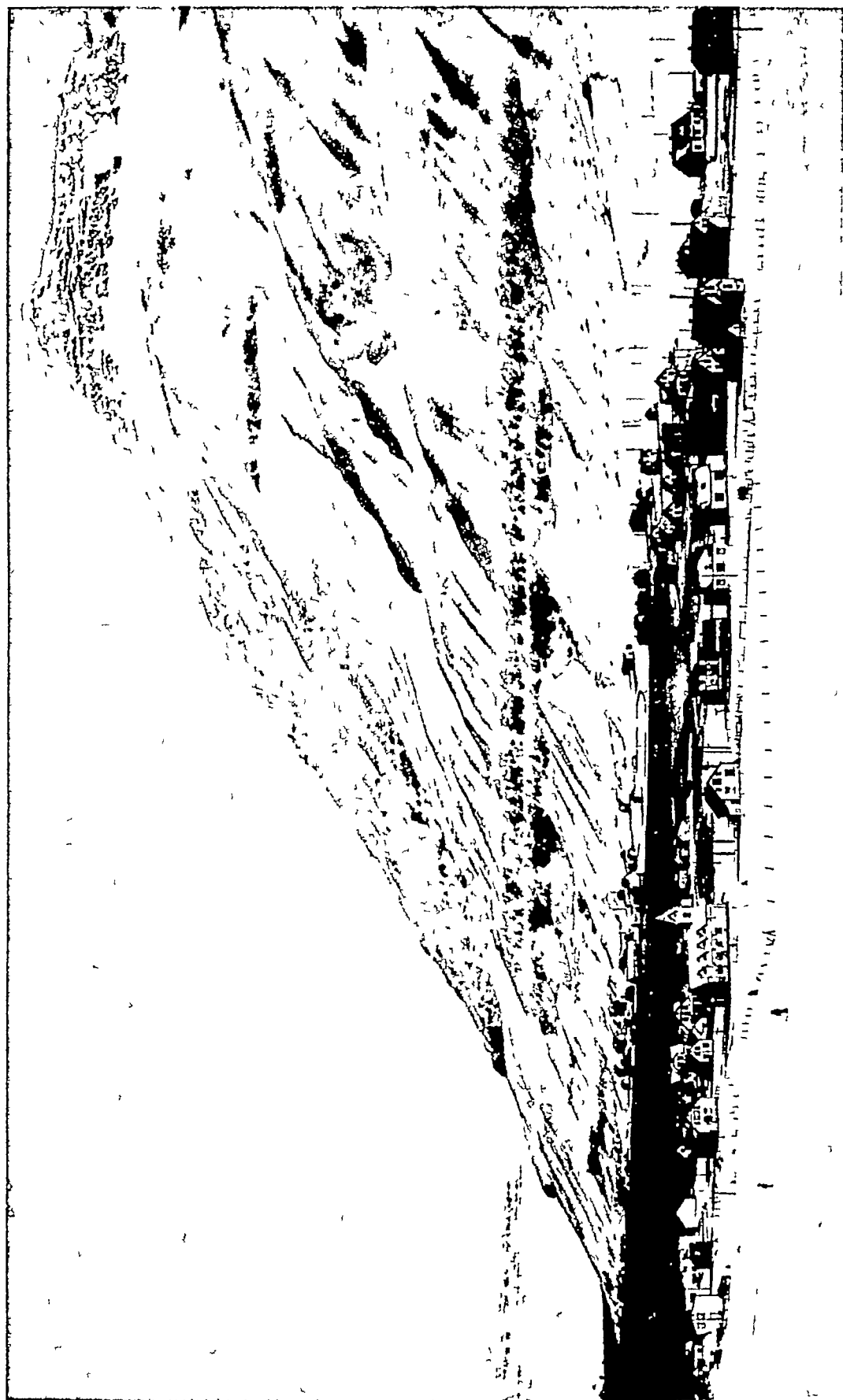


Herbert Filton

ICELAND *The only road of any real length in the island runs from Thingvellir to Reykjavik through the lowering Almannagja Gorge*



ICELAND Many impetuous torrents flow from the glaciers through deep canyon-like gorges their courses broken by falls and rapids



ICELAND Seydisfjörður, on the shores of its frozen fjord, is here seen buried beneath the winter snows that bind the land in their icy fetters for several months, stopping all travelling except by rough sleighs

J. Gunnarsson

Volcanic Outpost of the Arctic Circle

by W. Bisiker

Author of "Across Iceland," etc.

FROM the geographical point of view Iceland is one of the most peculiar countries in the world. It is an island lying about 5.5 miles to the north-west of the mainland of Europe, 4.5 miles from the north of Scotland, and is classed as a division of Europe though it is but 100 miles from the eastern side of Greenland. Its southern aspect is to the North Atlantic Ocean, the north touches the Arctic Circle and faces the Arctic Ocean.

It is Arctic in character for in the winter the seas to the north sometimes become frozen over. In recent geological times it had an ice cap similar to that now covering Greenland. There are still many ice-fields over parts of the country, the greatest of which Vatna-jökull has an area of about 3,700 square miles.

Gulf Stream Course to Iceland

The climate is a combination of Arctic severity and the mild humid conditions that prevail in the west of the British Isles. Sometimes Arctic ice accumulates, at others Iceland is nearly surrounded by a sea of comparatively mild waters. The mild side of the climate being due to the same cause that governs the British climate. The waters of the North Atlantic surface drift blown by the prevailing south-west winds from the great Atlantic circle of warm water past the British Isles, continue their course until they strike the south west corner of Iceland and then flow on, chiefly to the north-eastward eventually mingling with and becoming lost in the cold waters of the Arctic Ocean. There is much rain in the south west sometimes of a torrential character but there are quick changes, and the heavy rains

are not of long duration. The summers are mild and moist in the south west and in the river valleys and the winters raw and cold with much snow. It is much colder in the interior the north west and the east. In Reykjavik for instance the temperature averages about 30° Fahrenheit in the winter months and 51° in the summer months. In the cold mountain district however the temperature is much lower averaging 19° Fahrenheit in the winter and 47° in summer.

Photography at Midnight

From its position near the Arctic Circle there is a very long day in summer with continuous light for about three months and an equally long night with short interval of daylight in winter—so good is the light in summer that the writer took some perfectly good photographs at midnight in June though a rather long exposure was necessary. Much fog accumulates all round the coast and in the fjords owing to the meeting of the cold northern waters and the warm currents of the North Atlantic drift.

The writer had a strange experience on the north-west peninsula. From a ridge between Reykjarfjord and Velthileysa when a sea fog was blowing up the latter fjord with the sun shining brightly behind he suddenly saw cast upon the fog an elongated dark shadow of himself with an oval halo of brilliant colours round the shadow. His head was the centre of the halo and round it shone a bright golden yellow light which gradually changed in the outer rings to green and so on to blue indigo and violet thence the colours of the spectrum were continued outward in

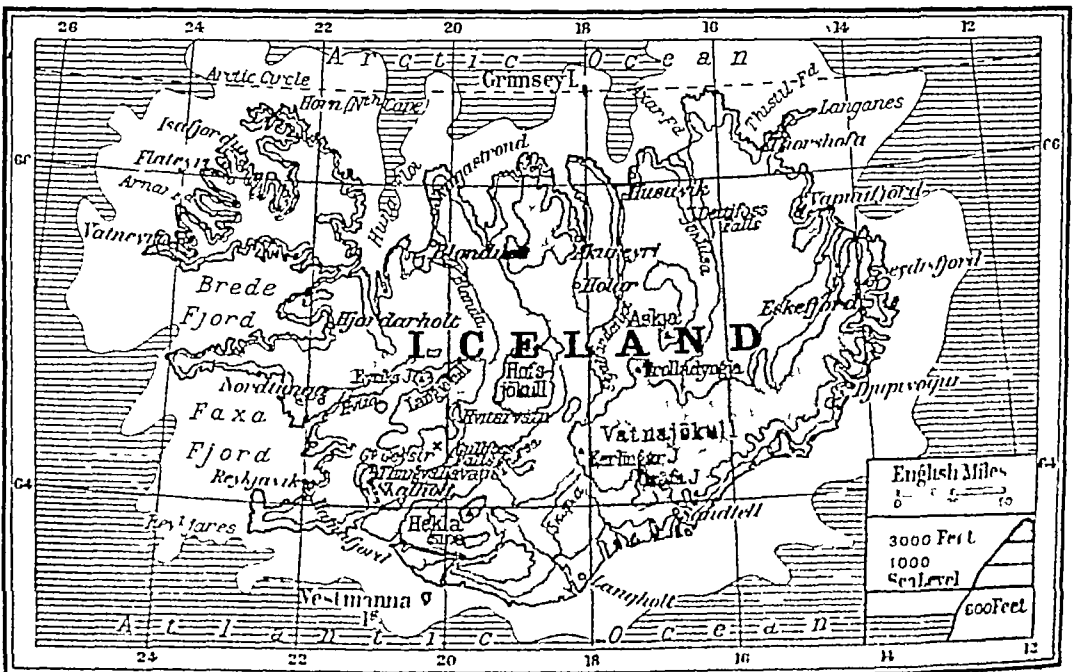
the reverse order, from violet to a brilliant red. The effect was rather startling at first. These halos are known as *Anthelia* (Greek, "opposite the sun"), or *Glories*.

The claim that Iceland be considered a part of Europe should rest partly on the fact that, though now so far away, it may in the past have formed part of the continent—the indications point to that assumption. The British Islands lie on the continental shelf and have but recently become detached through the encroachments of the sea. In the north-east of Ireland, in Antrim, are volcanic remains known as the Giant's Causeway and other well known specimens of columnar basalt, similar formations are at Staffa, where Fingal's Cave is known to many, and others of the western islands of Scotland, midway between the British Isles and Iceland lie the Faroes (Faar or Sheep Islands), which are also volcanic, being masses of basalt, flow upon flow, in Iceland there are many instances of the same volcanic forms. It is assumed that not long since, reckoned in geological time, a great fissure or crack lying in a north to south direction opened in the earth's crust and that from it a vast

quantity of the molten interior welled upward and covered the intervening area between Iceland and the British Isles, and so became one with and part of the continent of Europe.

Iceland is composed entirely of volcanic matter, being a mass of igneous rocks of various kinds—basalt, tuff, liparite, palagonite, etc., in process of gradual disintegration, and though one of the most desolate places in the world, there are many weirdly grand scenes in the interior, on the coast and in the river valleys. At Hvítarvatn in the middle of the country, the ice flows from Langjökull into an ice-cold lake where innumerable icebergs dot its surface.

These icebergs become smaller and smaller as they are pushed away by other and larger bergs just broken from the glaciers. These magnificent sights are sometimes rendered more striking by the ever-changing effects due to the extraordinary colouring caused by the gleaming sunshine suddenly breaking through a rift in the clouds, or by a lifting of the fog. Other features are the almost perpendicular basaltic cliffs of the north and east coasts. There are many most picturesque fjords on the east, north and west coasts, chiefly



RUGGED LAVA-MASS OF LONELY ICELAND

stepped and pyramidal cañons with shallow rivers running into them.

The principal jökull or ice-fields are in the south and in addition to Vatna almost 3,200 square miles in extent with about 6,400 feet as its highest point there are Hof and Lang jökull each over 500 square miles the former 3,600 feet high and the latter 5,140. These are the largest remains of the ice cap and extend from west to east across the lower half of the country.

Mountain ranges are comparatively few because a great part of the country is elevated tableland in the early stages of denudation and not much character has been given to the ranges. Herlin garfjöll is the most striking and picturesque range and lies to the south-west of Hofsjökull. It is noteworthy also as there are hot springs fumaroles and solfataras high up amongst the ice and snow—a region of frost and fire.

In this neighbourhood are many enormous "erratics," great blocks brought down by the glaciers. Other ranges worthy of mention are some that are without doubt the hard cores of old volcanoes—volcanic plugs or necks. One on the southern margin of Lang jökull is known as Jarlhetter the Earl's Hats because of the shape of the upper portions. A similar range called halfstindar is close to Laugarvatn a lake in which—because of its warm water—the early Christians were baptised. This region is interesting too for the fact that Thingvallavatn, the largest lake in Iceland, and its neighbourhood has historic associations for there at the Logberg (Law Rock) the



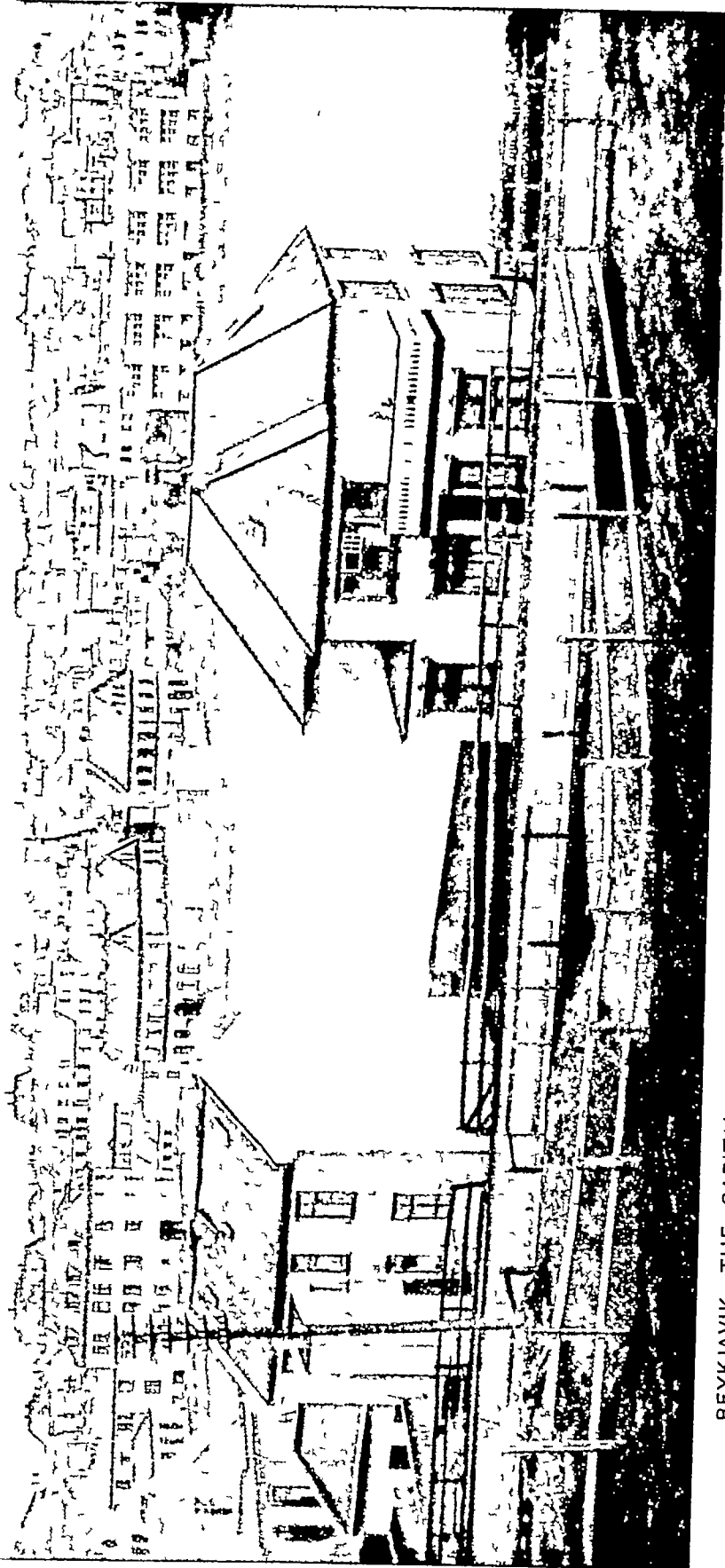
MAGNIFICENT WATERFALL AT SGOQAFQSS

Skogafoss is one of the sights of Iceland, being one of the finest waterfalls in Europe the water plunging over a ledge into a yawning abyss nearly 100 feet deep and throwing up dense loads of rainbow spray.

Althing or Parliament used to assemble in the tenth century. Not far away on the road to Reykjavik is a remarkable instance of a glaciated lava surface having thereon some of the perched blocks that helped in the smoothing and scratching process.

The highest points in the country are on the ice-fields Vatna, Eyriks (nearly connected with Langjökull) and Örða jökull, the latter an outlier of Vatna jökull to the south—the altitude in each case being about 6,400 to 6,500 feet.

Many volcanoes exist some of which have often been active in historic times. Hekla has the record for the number of eruptions—about thirty more than double that of Katla to the



J. GUNNARSSON

REYKJAVIK, THE CAPITAL AND CHIEF PORT OF ICELAND, WITH THE LAKE IN THE FOREGROUND
Reykjavik stands on the Kollafjord, an opening on the south west coast of the island, and has a population of about 16,000. The houses for the most part are made of wood, though now the chief buildings, such as the Senate House, where the Althing assembles and where there is a valuable historical library, are of stone construction. In the largest square of the town is a statue of Thorvaldsen, the famous sculptor, who was of Icelandic origin. The national library at Reykjavik consists of about 40,000 volumes, and there is also a valuable archaeological collection.



Richard Feltus

ONE OF ICELAND'S INDUSTRIES: THOUSANDS OF COD FISH BEING DRIED IN THE SUN FOR EXPORT

Fishing, especially as regards cod, is one of the main industries of the island. In the summer the waters are teeming with fish, especially since the banks in the North Sea are now signs of being exhausted. After the fish have been split open and cleaned, they are placed in the sun, and each day's catch is collected on trucks, running on light lines, and gathered in great piles, or which are placed in tarps. By the next day the fish are again exposed to the sun until they are really fit to be packed for export.

south-east Others with several recorded eruptions are Trolladyngja and Oräfa One of the most recent outbursts, that at Askja, north of Vatnajökull, was of a terrific nature and caused widespread destruction over a large area, as also did that of Skapta in 1783, the lava of which swept down the river valley and caused the death of hundreds of human beings and thousands of horses, cattle and sheep

Two Gigantic Parallel Rifts

Hot springs are found in several regions, and there are many instances of the characteristic sinter (silica) terrace formations, the most notable the writer saw being those at Geysir, at Tunguhver, at Hveravellir, high up in the mountains of Kerlingarfjöll amid the ice and snow, and at Reykir near Husavik There are several rifts, or gjas, the most remarkable being the two parallel rifts Almannagja (Allmen's Rift) and Hrafnagja (Raven's Rift) about four miles apart Between these rifts the whole earth has dropped about a hundred feet It is a most extraordinary break in the earth and forms a "rift valley," the result being due doubtless to vast underground waters flowing from the northern glacial lakes Some extraordinary caves at Surtshellir, their origin probably due to a big bubble formation, have had their size much enlarged by one of the underground rivers from the northern glacial lakes, water-worn lines in the caves indicate the various levels of the old river, which now flows at a still lower level

Deserts of Sand and Lakes of Ice

There are several sand deserts, the principal of them being known as Sprengisandr and Storisandr The writer crossed one of the sand deserts, that known as Littlisandr, but there was not a very great accumulation of sand All lie to the north of Vatna and Hofsjökulls To complete the mention of the extraordinary combination of features notice must be taken of two series of glacial lakes, one to the

north of Langjökull and the other to the west of Vatnajökull, and of a number of crater islets in Brede Fjord on the west coast Among the largest lakes besides Thingvallavatn in the south-west, where the country has been worn down to the level of a peneplain, or plain of denudation, are Hvitarvatn to the east of Langjökull and Myvatn in the north-east

The rivers are numerous, the longest being the Jökulsa, the Skjalfandafljot and the Lagarfljot, all flowing northward, and the Thorsa which flows south-westward—these are the most important and all have their chief origin in Vatnajökull, the last named having also a branch which flows from Hofsjökull

Fording an Iceland Stream

Many of the rivers are swift-flowing streams and become torrents after the sun on a warm day has melted the ice and snow When fording them the sensation is very uncanny—one's pony seems to be rushing up-stream against the current, the ponies and their riders in front seem to be moving rapidly as the water rushes by and foams round them, but the pace is really very slow as the ponies plod steadily along Quicksands are common in the rivers and everybody has a wholesome dread of fording such parts A member of the writer's party was drowned in the Herradsvatn, he was thrown from his pony when it sank in the quicksand

Remarkable waterfalls lie in the courses of the rivers, the best known and most visited being Gullfoss on the Hvita in the south-west Dettifoss on the Jökulsa in the north-east is another fine fall, others are Gothafoss on the Skjalfandafljst and one in Seydisfjord

In the hot-spring regions are many active geysers Great Geysir itself when in action is one of the sights of the world Certain premonitory rumblings always precede an eruption, which is a wonderful sight, great clouds of steam rise from the crater, and stream after stream of boiling water shoots up into



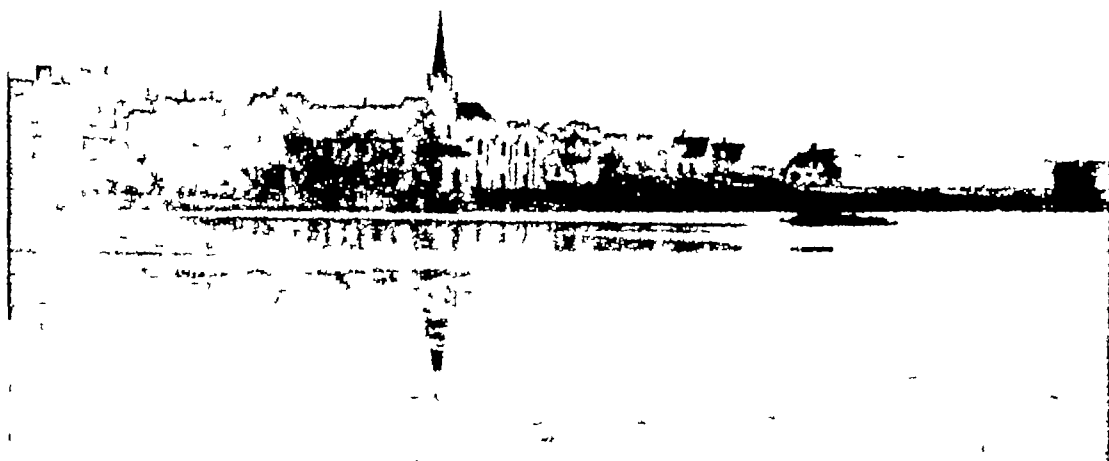
HEKLA THE GREAT VOLCANO OF ICELAND OVER 5000 FEET HIGH

Hekla, among others for position, is not the highest island but miles of Hekla, the largest of the island, and after the eruption and no feet in feet deep lava flows were to be seen. Hekla is a volcano, and no being as on this narrow way of the road it is not a volcano, it is during the eruption.



GUIDE POSTS ALONG THE ROAD FOR THE SNOW BOUND TRAVELLER

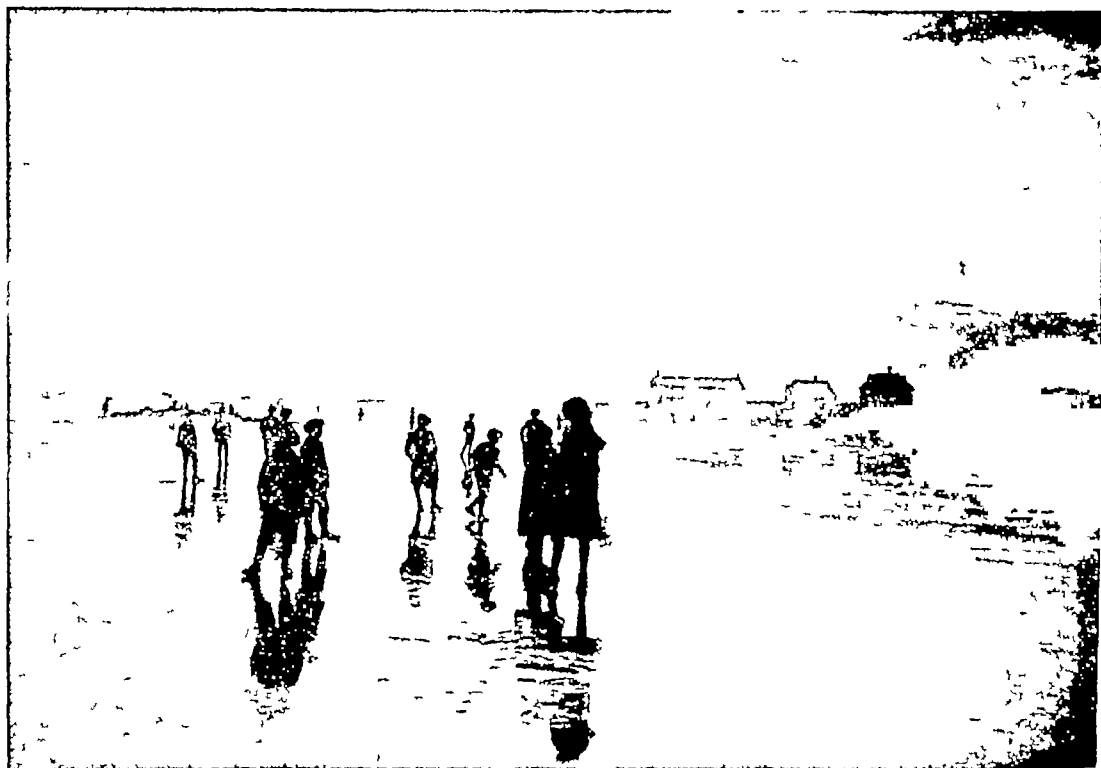
Iceland has neither railroad nor stage lines, and all travelling must be done on foot or by means of the hardy ponies. In the winter the roads are buried deep beneath the snows and calms. Stones are erected to mark the course of the road, the arms pointing toward the road. Smaller cairns are placed along the footpaths and the brink of dangerous precipices.



Herbert Felton

CHURCH AND WATER-FRONT OF THE SMALL TOWN OF HAFNAFJORD

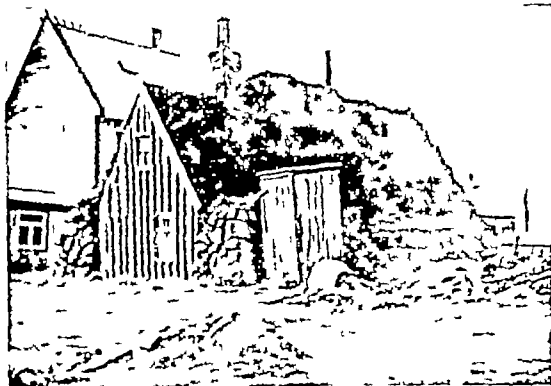
About ten miles south of the capital is Hafnafjord with a population of about 2,300, as is customary in Iceland, the majority of the houses are built of wood. Owing to the rigour of the climate of the central plateau, the bulk of the population is gathered in the towns on the lowlands of the coast and along the fjords where there is good grazing to be found.



Professor P. Cowl

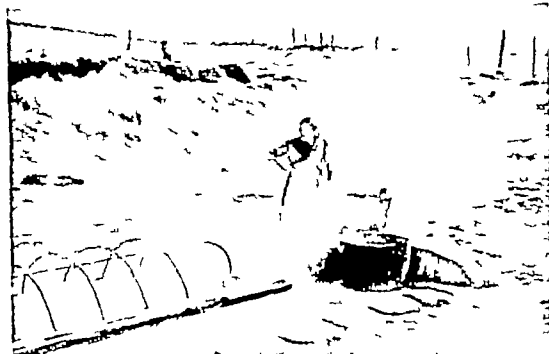
CHILDREN PLAYING UPON THE FROZEN LAKE AT REYKJAVIK

At Reykjavik a mountain stream spreads out into a sheet of water about the same size as the Serpentine in London, around which has been built the best quarter of the town. In the winter the lake is completely frozen over, and becomes a favourite playground for the children. Though the town itself is by no means attractive, the surrounding scenery is very beautiful.



ORIGINAL TYPE OF PELT HOUSE OF THE INHABITANTS OF ICELAND

The peat house is built of vertical wooden planks and has a steep gabled roof. The chimney is built of stones. The house is situated on a rocky, uneven ground. A small, simple wooden shed stands next to it. In the background, a hillside with sparse vegetation and a small church spire are visible.



CONVENIENT AND EVER READY HOT WATER SUPPLY AT REYKJAVIK

In Iceland the numerous hot springs are made to be of service as at Reykjavik where practically the whole of the water supply is drawn from a spring called the Lang, and is pure. The water is heated and often heated with it. Wool is also washed in the springs and in some places open-air baths have been made from which water is taken to put in houses.



J. Gunnarsson

GEYSERS SPOUTING AMID THE BARREN WASTES OF ONE OF THE MOST VOLCANIC REGIONS OF THE EARTH

There are more than 100 volcanoes many of which have been in the Great Geysir, now less active than it used to be. Hot springs are found all over the volcanic districts sulphur springs and lakes of boiling mud are found, while there are carbonic acid springs on the peninsula of Snafellsnes.

the an outer rim is a hundred feet high and the eruption is for two or three minutes before it gradually subsides and ceases. The inner crater of Geysir is about sixteen feet in diameter and is surrounded by a water rim about a dozen feet of something like ten feet and raised ten to fifteen feet above the general level of the ground.

In shape Iceland is only resembled Ireland. If you take a map of Ireland and then turn it round so that the coast becomes the north the resemblance is at once apparent of both size and outline. While Ireland is about one fifth of the area being 4045 square miles. The similarity ends with its shape and the natural features are entirely different except that peat bogs are common to the two countries.

The trade winds cause the vegetation to be diversified in character following the wind in many cases but a few inches in height they do not as a rule rise their heads above the level of the grass. At Akureyri in the north there are specimens of mountain birch twenty to thirty feet high.

Miniature Forest of Dwarf Trees

Diminutive forests occur in places and the Akureyri district produces willows one to two feet high. In other places the writer traversed small islands and willows three to five feet high and in one spot near Kalminstunga in the west there was a forest of birches nearly six feet in height with a few standing higher. In one specially sheltered spot on the eastern side of the island the birch can be seen growing to about twenty feet. In some of the river flats there are large areas of cotton grass.

On the sides of the accumulations of moraine matter many instances are seen of peculiar terrace formations having edges or banks of vegetation that seem to grow in irregular lines and arrest the natural descent of alluvial matter thus forming a series of terraces or steps that rise as a rule but a few inches one above another. The vegetation collects some of the wind blown

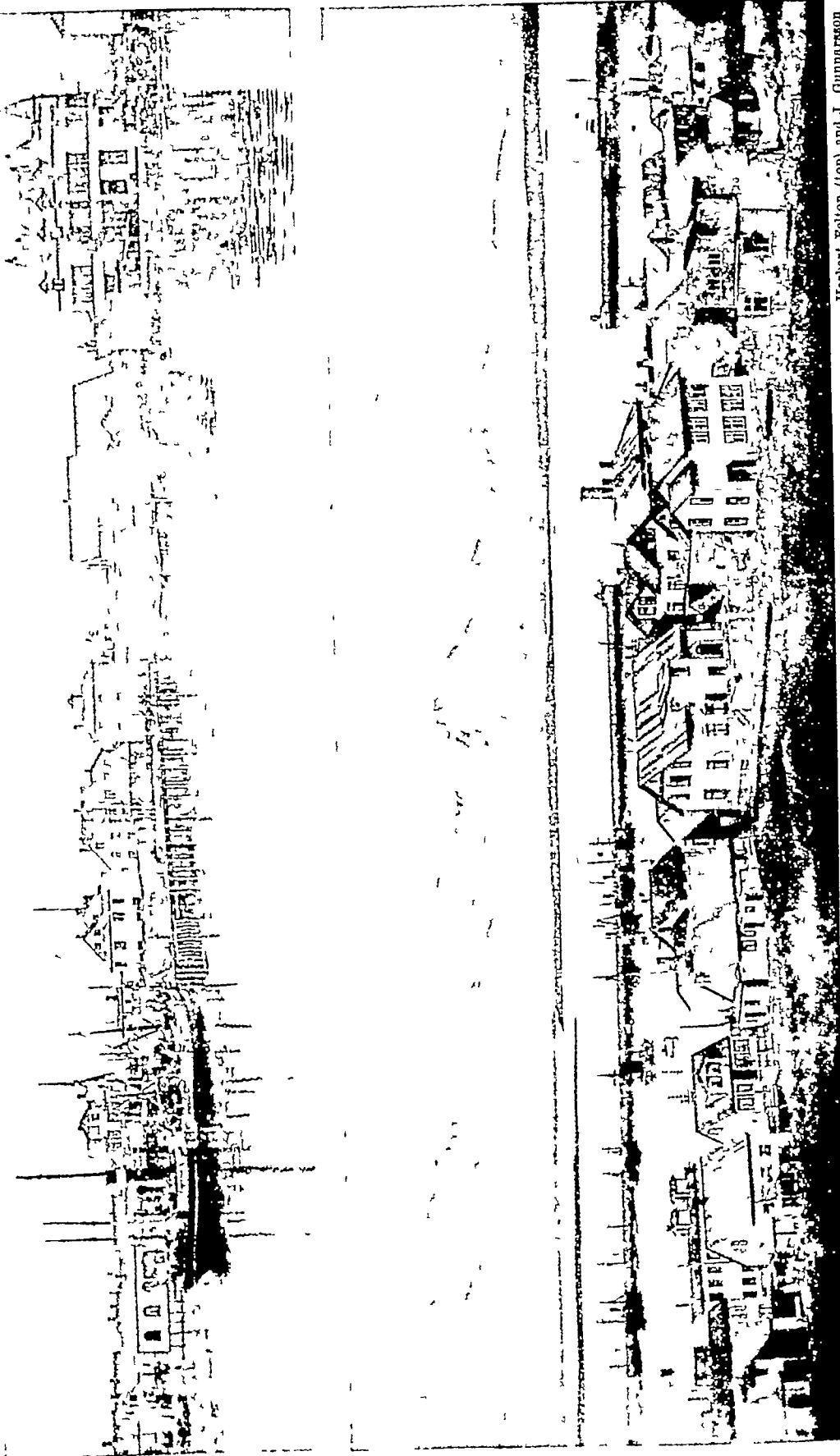
sand of the deserts which assists the growth of the terraces. Sometimes the vegetation overgrows the lower edges of the terraces and continued growth results in the building up of small mounds and hummocks that are generally flat topped. This hummocky land is usually in fairly level country where the continuous traffic of general traffic has worn many ruts or tracks that have since been kept open and often deepened by the weather. The cross-country traffic almost ceased when sea traffic joined up the various ports. Frost occurs in some of the river valleys and the fjords. Some of the bogs have been drained with quite good results. Green mosses and lichens cover the masses of lava. Many species of algae are found growing in the various hot springs.

Sturdy Sure-footed Ponies

Though the alluvium in the valleys and in the south west is fertile grain cannot be raised because the heat of the sun is not strong enough as a rule to ripen the grain though it ripens occasionally. The chief agricultural products are hay cabbages potatoes, rhubarb etc. Ponies, cattle and sheep are bred extensively. The ponies, a number of which are exported to the British Isles are hardly little beasts, averaging about twelve hands, born and bred in the hill they are accustomed to forage for a living in the roughest country and their experiences cause them to become the sure-footed animals that they are. It is wonderful how hard they keep on nothing but green food they never see a bit of "hard tack" yet when required they can jog along for twelve hours or more and be fresh at the end.

Mount and Guide for One

On one occasion the writer and a guide rode the same ponies from eight in the morning till eleven at night except for a rest of about three hours in the middle of the day when other ponies were used. The last two or three hours were ridden in the dark and as the writer



Herbert Felton (top) and J. Gunnarsson

FINE HARBOURS OF ISAFJORDUR (TOP) AND REYKJAVIK ON THE NORTH-WEST AND SOUTH-WEST COASTS

Isafjordur is a small port with a magnificent natural harbour on the north west coast, and has over 2,000 inhabitants, it owes its importance to the cod and herring fisheries and curing establishments in the neighbourhood. There is a steamer connexion from Copenhagen with Reykjavik, where practically the whole of the exports and imports are handled. The former include dairy produce, fish, skins, eiderdown and woollen goods, while among the latter are cereals, sugar, metal goods, timber and coal. The spinning and knitting of wool is an important industry, the native tweed being the principal material for the clothing of the inhabitants.

enable it to see the track through the lava he at night and in the poorer land even past tiring to make to make the best of the way this he did at a good pace without a rest. Cattle are killed during the winter months and at a sheep the latter being run on pasture land in the day time when the weather is favorable. Sheep are all killed some times they may be seen wandering the rivers. Many cattle are with it later.

Other domestic animals are cat and dogs the latter being a first class dog. The only wild animal in addition to the fox is the reindeer which was introduced into Iceland in the year 1770. It is doubtful however whether many will exist in the future. Some time ago it was reported that the land on which it

How the Down is Collected

The country is much cultivated in various crops for instance in Akropolis in the east at some distance from the north and in the north and in the north. The capital Reykjavik the last of which the winter stated. The sea was approaching an end many of the people had been killed and parents and young had departed or were swimming in the waters near the island. The old birds pluck the down from their backs to line the nest and it may be removed two or three times before the nests are abandoned. The down is cleaned by girls who take it in handfuls and rub it over a wire grating the down clings to the wires the dirt falling through. This industry is highly protected and severe penalties are imposed for breaches of the regulations.

Swans are to be seen on some of the rivers, and duck grouse ptarmigan and golden plover are in abundance in some districts. There are many other species of birds. The waters of Brede Fjord in the north-west are sometimes alive with puffins in their thousands they flap along the surface of the water or dive beneath it when disturbed by the

passage of a steamship through their resort. Seal frequent Huna Flax and the north west as do whales and harks. Of fish the most common is the herring halibut and cod abound in the seas around Iceland. In terms of various nations there are the following grounds which are among the best in the world. The rivers yield large quantities of fish to it salmon trout and salmon especially. Many of the salmon rivers are taken up by the British who find first class sport there.

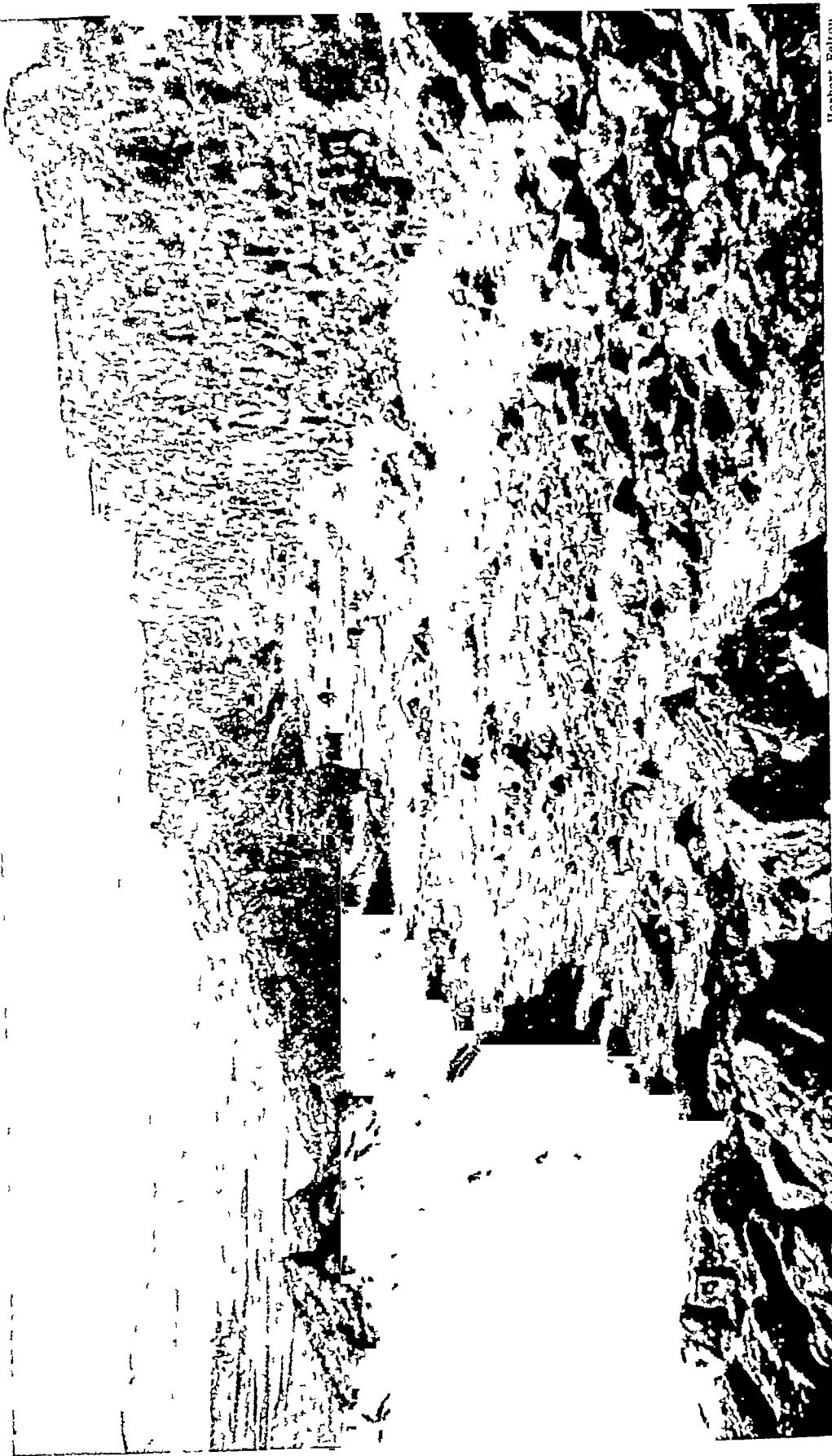
Catch and Cure of Fish

Of the industries of Iceland herring fishing is one of the most important and several well equipped fishing stations especially in the north west give employment to many of the most competent fishers. At Arnar Fjord the most fish is taken in the season and the women clean and cure them. At this place there is also a small fish factory.

In the north west peninsula too the whaling station is located the most important one at Framnes Hvalvagn and Hvalfjörður. The whaling is a very busy hour or two owing to the nauseating influence of the blubber at the station at Framnes and saw the process of reducing whales to the commercial forms of oil whalebone and manure.

Malodorous Whaling Station

More than a dozen small whales were floating in the sea beyond a platform where the whales were cut up one was hauled upon the platform and cut into big lumps. The platform was a horrible place covered as it was with slimy offal and refuse this stuff being valueless was disposed of by being shot into the fjord there to pollute its waters the stench that arose from the decomposing matter was too disgusting for words to describe. Large knives in a rotary machine cut up the blubber which was taken to the boiling down room and there treated by steam for ten hours in big cylindrical tanks.



Herbert Felton

GIGANTIC RIFT IN A VAST FIELD OF LAVA WITH LAKE THINGVALLA IN THE DISTANCE

Iceland possesses a great number of lakes, the largest being Thingvallvatn, with an area of 25 square miles, lying 20 miles east of Reykjavik. Into this lake runs a small stream, the Oxara, which passes through the great Almannagja, depicted in the photograph. This gorge is an extraordinary break in the earth extending for three or four miles across the country and being in places over 100 feet deep. On the shores of the lake is Thingvellir, where the Althing, or Parliament, used to assemble in the tenth century, the spot where it met being known as the Logberg, or Law Rock.

The oil then set free and floating on the top is drawn off into casks and shipped to Scotland to be refined. The whale-bone cut from the upper jaw of the head is pulled apart then washed in soda and water and dried, when it is ready for exportation. The bones are boiled, dried and ground to a fine powder which is exported for manure. After extracting the oil from the blubber the refuse is dried in revolving machines and reduced to the consistency of coarse meal. This too is used as manure under the commercial name of guano. The harpoons used in the whaling vessels are shot into the whale from a short cannon in the bows of the vessel. The heads are hollow and filled with gun powder. When the whale dashes off the tension on the line attached to the harpoon causes the arrow-headed blades to expand and the charge of gunpowder to explode. The shell bursts and usually kills. The whales are located at sea by the look-out man posted in the "bird's-nest" on the foremast.

Cream with a Peaty Flavour

In the farming industry large quantities of milk are produced and the whirring of the cream separators is heard every morning on the best farms. Skyr is one of the articles of food served at all farmhouses. It is a kind of clotted cream, and is eaten with powdered sugar and milk or ordinary cream poured over it. At most of the farms it is of excellent quality though sometimes it has a peaty flavour due to the nature of the surrounding soil.

Minerals are few if you except Iceland spar a double refracting crystal found in a vein in the bed of the stream Sillfralækur close to Eskifjord on the east coast sulphur and iron pyrites. The writer was shown a specimen of the latter as gold and was taken to see an outcrop of coal, but he found it to be obsidian the black form of liparite. There is, however a species of lignite which lies in beds between the basalt flows near Isafjordur in the north-west peninsula of the island.

About half the population lives by agriculture and a quarter by the fishing industry. The other quarter finds occupation as general labourers in manufacturing and commercial pursuits and in the professions.

The people are generally healthy. tuberculosis is the chief disease treated at a sanatorium near Reykjavik and leprosy is confined to two or three districts. About fifty physicians are engaged by the government but there are other practitioners and specialists. District hospitals provide for local needs.

Arrangement of Icelandic Houses

In the country the houses, known as baer have turf walls and roof. The front of the house and the floors of the best rooms are of wood, the other rooms are floored with lava blocks, and the walls of the principal rooms are lined with wood. The bed-chamber called bathstofa is used also as a living and work room. As its name implies, this was once the bath-room but bathing having gone much out of fashion, the tub at short intervals is no longer considered necessary by most people. This chamber is fitted with a series of open bunks ranged along the sides, where the various members of the family sleep at night. Some of the bunks are the receptacles of a miscellaneous number of articles. There are several guest chambers as a rule but when the farmhouse has not the necessary accommodation it is the custom for travellers to sleep in the churches and sometimes even to have meals served there. Wood and corrugated iron buildings are gradually taking the place of the baer in the villages and towns they are common and there also a few concrete buildings are in evidence.

Exploiting Water Power

Paraffin oil is the principal illuminant in the houses, but gas and electricity the latter produced by water power are used in some places for lighting heating and cooking. The fuel is coal and peat.

Communication between the various ports round the coast is carried out by government steamships and by those of a private company, both of which carry passengers and goods. Inland communications and transport are by pony-drawn vehicles and motor-cars where there are suitable roads. Slighs are used in winter for transport of goods.

Much progress has been made in Iceland during the first quarter of the twentieth century. In 1900 there were only five lighthouses round the coast, now there are more than fifty. At that time there were scarcely any roads, but in the interval many roads have been made and rivers bridged, locomotion has thus been much improved, especially in the south-west. Iceland is in telegraphic communication with the outside world and the telephone is general, there are also several wireless stations.

The volume of trade has increased rapidly since 1900—five or six fold, to about £2,591,300 worth of imports and £2,672,090 of exports in 1919. The principal imports include timber, galvanised iron, cement, ironwork, motor-cars, electrical fittings, coal, foodstuffs, cloth and clothing. The chief article of export is fish, which comprises two-thirds of the total value. It is despatched fresh, packed in ice, also in salted and cured states, the chief kinds being cod, halibut and herring. The other items of export include ponies, salt meat, sealskins, wool, manure products from whales,

whalebone, cod-liver oil and sheepskins. The country has a national debt of £828,000, but the money has been employed in the construction of national works and in providing capital for government trading.

Iceland is served by two banks, each having several branches, with a turnover that increased eighty fold in eighteen years, from about £500,000 in 1902 to nearly £12,560,000 in 1920. The metric system is used for weights and measures. The coinage is based on the krona, common in Scandinavia and worth 100 in British money.

Reykjavik is the capital and also the university town and has a population of about 20,000. It has gasworks and an electrical plant. Many of the houses have all modern comforts, including central heating. It has a sheltered harbour that cost about £250,000.

Other towns of importance, all seaports, are Akureyri with a population of 2,500, Hafnafjord 2,300, Isafjordur 1,980 and Seydisfjord 850. The total population of Iceland is about 100,000.

Iceland was colonised from 874 to 930 mainly by chieftains and their followers from Norway, though the first settlers were Irish. Till 1262 it was a republic, but it then passed under the influence of Norway. In 1380 it came under Danish protection, but in 1918 it was acknowledged a sovereign state united to Denmark under a common king.

ICELAND GEOGRAPHICAL SUMMARY

Natural Division. Like Greenland and N.W. Scotland, Iceland is a relic of the ancient continent of Arctis, with volcanic activity as an evidence of present instability.

Climate and Vegetation. On the western edge of the "Winter Gulf of Warmth" of the North Atlantic, Iceland has a climate similar to that of Britain, with abnormally warm and humid winters, due to the set of the oceanic winds and drifts which bring warmth. The ocean to the east is ice-free, to the west is troubled with pack-ice. When the winds fail the climate is Arctic. Semi-tundra (cf. Arctic lands) in

vegetation with some trees. Cereals can seldom be ripened.

Products. Cabbages, potatoes (Cf. Labrador). Ponies, cattle, sheep. Whales, herring, cod, etc. (Cf. Newfoundland and the Lofoden Is., Norway). Eiderdown from the eider ducks.

Outlook. Except for the fishery, in one of the world's backwaters, with the limitations of an infertile soil and an inclement climate and a lack of other resources, Iceland is apparently condemned to continue a self-contained existence as a typical land of hardship, where harsh nature unbends but little.



